

# Implementing a Software-Defined Datacenter / SCVMM u. Hyper-V (MOC20745).

## Virtualisierung mit Microsoft Technologien



Seminar



Zurzeit keine Termine



Teilnahmebescheinigung



Präsenz



40 Unterrichtseinheiten

Seminarnummer: 29465 | Herstellernummer: MOC20745

Stand: 18.09.2025. Alle aktuellen Informationen finden Sie unter <https://akademie.tuv.com/s/29465>

Dieser fünftägige Kurs vermittelt das Wissen, wie man virtualisierte Infrastrukturen in Datacentern mit der Hilfe vom System Center 2016 Virtual Machine Manager und Hyper-V implementiert und administriert.

Lesen Sie auch die Hinweise zu den MCSA/MCSE Zertifizierungen.

## Nutzen

Mit dem System Center Operations Manager monitoren Sie die Infrastruktur und zu deren Schutz wird im Kurs der Data Protection Manager eingesetzt und erklärt.

Nach Beendigung dieses Seminares verfügen Sie über dieses Wissen:

- Explain the different virtualization options.
- Install and manage Hyper-V on Windows Server 2016.
- Install and configure System Center 2016 Virtual Machine Manager.
- Manage storage fabric and fabric updates.
- Configure and manage the Virtual Machine Manager library and library objects.
- Manage the networking fabric.
- Create and manage virtual machines by using Virtual Machine Manager.
- Manage clouds in Virtual Machine Manager.
- Manage services in Virtual Machine Manager.
- Monitor a virtualization infrastructure by using System Center Operations Manager.
- Implement and manage Hyper-V Replica and Azure Site Recovery.
- Protect virtualization infrastructure by using Data Protection Manager.

Eine Zertifizierungsprüfung ist bisher nicht geplant (Stand März 2017)

# Zielgruppe

This course is intended for IT professionals and administrators who are responsible for designing, implementing, and managing virtualization infrastructure in a software-defined datacenter by using System Center 2016 Virtual Machine Manager. The main focus of this course is on managing Hyper-V virtualization infrastructure in Windows Server 2016, although the course also covers other virtualization platforms that can be managed by using Virtual Machine Manager 2016.

## Voraussetzungen

Teilnehmer sollten das Wissen aus diesen beiden Windows Server 2016 Seminaren besitzen:

- MOC20740 - Storage & Compute with Windows Server 2016
- MOC 20741 - Networking with Windows Server 2016

Alternativ ist der MOC20743 Upgrade-Kurs und/ oder die MCSA: Windows Server 2016 Zertifizierung möglich.

## Inhalte des Seminars

### Module 1: Introduction to server virtualization

This module explains the different virtualization solutions. It also describes the concepts of software-defined datacenter and Microsoft Azure.

#### Lessons

- Overview of Microsoft Virtualization
- Introduction to the software-defined datacenter
- Extending virtualization to the cloud

### Module 2: Overview of Hyper-V virtualization

This module explains how to install and manage Hyper-V in Windows Server 2016.

#### Lessons

- Installing and configuring the Hyper-V role
- Creating and managing virtual hard disks and virtual machines
- Creating and using Hyper-V virtual switches
- Implementing failover clustering with Hyper-V

## Module 3: Installing and configuring System Center 2016 Virtual Machine Manager

This module explains how to install and configure System Center 2016 VMM for managing a virtualization environment. Lessons

- Overview of System Center 2016 VMM
- Installing System Center 2016 VMM
- Adding hosts and managing host groups

## Module 4: Managing storage fabric and fabric updates

This module explains how to manage storage fabric and fabric updates in VMM.

Lessons

- Overview of server virtualization storage technologies
- Managing storage fabric
- Managing fabric updates

## Module 5: Configuring and managing the Virtual Machine Manager library and library objects

This module describes how to configure and manage VMM library and library objects. It also describes the differences between profiles and templates and how they are used.

Lessons

- Overview of the VMM library
- Preparing Windows for deployment in VMM
- Working with profiles
- Working with virtual machine templates

## Module 6: Managing the networking fabric

This module explains how to manage networking fabric in VMM.

Lessons

- Networking concepts in VMM
- Managing Software-Defined Networking
- Understanding network function virtualization

## Module 7: Creating and managing virtual machines by using Virtual Machine Manager

This module explains how to create and manage virtual machines by using VMM.

### Lessons

- Virtual machine management tasks
- Creating, cloning, and converting virtual machines

## Module 8: Managing clouds in System Center 2016 Virtual Machine Manager

This module explains how to create and manage clouds by using VMM.

### Lessons

- Introduction to clouds
- Creating and managing a cloud
- Creating user roles in VMM

Module 9: Managing services in Virtual Machine Manager This module explains how to create and manage services in VMM.

### Lessons

- Overview of services in VMM
- Creating and managing services in VMM

## Module 10: Monitoring a virtualization infrastructure by using System Center Operations Manager

This module explains how to use Operations Manager for monitoring virtualization infrastructure.

### Lessons

- Operations Manager architecture and security
- Using Operations Manager for monitoring and reporting
- Integrating Operations Manager with VMM and DPM

## Module 11: Implementing and managing Hyper-V Replica and Azure Site Recovery

This module explains how to implement and manage Hyper-V Replica and Azure Site Recovery

### Lessons

- Implementing and managing Hyper-V Replica
- Implementing and managing Azure Site Recovery

## Module 12: Protecting a virtualization infrastructure by using Data Protection Manager

This module explains how to use DPM for protecting virtualization infrastructure.

### Lessons

- Overview of backup and restore options for virtual machines
- Configuring and managing DPM for virtualization infrastructure protection

## Wichtige Hinweise

**UPDATE zur MCSA/MCSE Zertifizierung:** Ab 1.2. 2021 sind diese Prüfungen nicht mehr verfügbar, und deshalb können die damit verbundenen Zertifizierungen nicht mehr neu erreicht werden.

## Terminübersicht und Buchung

Buchen Sie Ihren Wunschtermin jetzt direkt online unter <https://akademie.tuv.com/s/29465> und profitieren Sie von diesen Vorteilen:

- Schneller Buchungsvorgang
- Persönliches Kundenkonto
- Gleichzeitige Buchung für mehrere Teilnehmer:innen

Alternativ können Sie das Bestellformular verwenden, um via Fax oder E-Mail zu bestellen.