

# MWS3-1 - MOC 20743 - UPGRADING YOUR SKILLS TO MCSA: WINDOWS SERVER 2016

Categoria: Windows Server 2016

## INFORMAZIONI SUL CORSO



Durata:  
5 Giorni



Categoria:  
Windows Server 2016



Qualifica Istruttore:  
Microsoft Certified  
Trainer



Dedicato a:  
Professionista IT



Produttore:  
Microsoft

## OBIETTIVI

Installare e configurare Windows Server 2016.

Descrivere le funzionalità di archiviazione in Windows Server 2016.

Implementare i servizi di directory.

Implementare Active Directory Federation Services (ADFS).

Descrivere le modalità di networking.

Implementare Hyper-V.

Configurare le funzioni di rete avanzate.

Implementare i Software Defined Network.

Implementare l'accesso remoto.

Distribuire e gestire container Windows e Hyper-V.

Implementare il clustering di failover.

Implementare il clustering di failover utilizzando le macchine virtuali.

## PREREQUISITI

Due o più anni di esperienza con la distribuzione e la gestione di Windows Server 2012 o Windows Server 2008;  
Esperienza quotidiana di NS di Windows Server 2012 o Windows Server 2008.

Esperienza di implementazione di reti Windows.

Esperienza di implementazione di Active Directory.

Esperienza di implementazione di virtualizzazione Windows Server.

Conoscenze equivalenti alle credenziali MCSA di Windows Server 2008 o Windows Server 2012.

## CONTENUTI

### Module 1: Installing and configuring Windows Server 2016

Introducing Windows Server 2016

Installing Windows Server 2016

Configuring Windows Server 2016

Preparing for upgrades and migrations

Migrating server roles and workloads

Windows Server activation models

**Lab : Installing and configuring Nano Server**

Installing Nano Server

Completing post-installation tasks on Nano Server

After completing this course, students will be able to:

Explain Windows Server 2016.

Install Windows Server 2016.

Configure Windows Server 2016.

Prepare for upgrades and migrations.

Migrate server roles and workloads.

Describe the Windows Server activation models.

**Module 2: Overview of storage in Windows Server 2016**

Overview of storage in Windows Server 2016

Implementing Data Deduplication

Configuring iSCSI storage

Configuring the Storage Spaces feature in Windows Server 2016

**Lab : Implementing and managing storage**

Implementing File Server Resource Manager (FSRM)

Configuring iSCSI storage

**Lab : Implementing and managing advanced storage solutions**

Configuring redundant storage spaces

Implementing the Storage Spaces Direct feature

After completing this module, students will be able to:

Explain storage in Windows Server 2016.

Implement Data Deduplication.

Configure iSCSI storage.

Configure the Storage Spaces feature in Windows Server 2016

**Module 3: Implementing Directory Services**

Deploying Active Directory domain controllers

Implementing service accounts

Azure AD

**Lab : Implementing and Managing AD DS**

Cloning a domain controller

Implementing service accounts

After completing this module, students will be able to:

Deploy AD DS domain controllers.

Implement service accounts.

Explain Azure AD.

**Module 4: Implementing AD FS**

Overview of AD FS

Deploying AD FS

Implementing AD FS for a single organization

Implementing Web Application Proxy

Implementing SSO with Microsoft Online Services

**Lab : Implementing AD FS**

Installing and configuring AD FS

Configuring an internal application for AD FS

**Lab : Implementing Web Application Proxy**

Implementing Web Application Proxy

After completing this module, students will be able to:

Describe of AD FS.

Deploy AD FS.

Implement AD FS for a single organization.

Implement Web Application Proxy.

Implement SSO with Microsoft Online Services.

Implement SSO with Microsoft Online Services

**Module 5: Implementing network services**

Overview of networking enhancements

Implementing IPAM

Managing IP address spaces with IPAM

**Lab : Implementing network services**

Configuring DNS policies

Configuring DHCP failover

Configuring IPAM

After completing this module, students will be able to:

Describe networking enhancements.

Implement IP address management.

Manage IP address spaces with IPAM.

**Module 6: Implementing Hyper-V**

Configuring the Hyper-V role in Windows Server 2016

Configuring Hyper-V storage

Configuring Hyper-V networking

Configuring Hyper-V virtual machines

**Lab : Implementing server virtualization with Hyper-V**

Installing the Hyper-V server role

Configuring virtual networking

Creating and configuring a virtual machine

After completing this module, students will be able to:

Configure the Hyper-V role in Windows Server 2016.

Configure Hyper-V storage.

Configure Hyper-V networking.

Configure Hyper-V virtual machines.

**Module 7: Configuring advanced networking features**

Overview of high-performance networking features

Configuring advanced Hyper-V networking features

**Lab : Configuring advanced Hyper-V networking features**

Creating and using Microsoft Hyper-V virtual switches

Configuring and using the advanced features of a virtual switch

After completing this module, students will be able to:

Describe high-performance networking features.

Configure advanced Hyper-V networking features.

**Module 8: Implementing Software Defined Networking**

Overview of Software Defined Networking

Implementing network virtualization

Implementing Network Controller

#### **Lab : Deploying Network Controller**

Preparing to deploy Network Controller

Deploying Network Controller

After completing this module, students will be able to:

Describe Software Defined Networking.

Implement network virtualization.

Implement Network Controller.

#### **Module 9: Implementing remote access**

Remote access overview

Implementing DirectAccess

Implementing VPN

#### **Lab : Implementing DirectAccess**

Configure DirectAccess using the Getting Started Wizard

Testing DirectAccess

After completing this module, students will be able to:

Describe common remote-access solutions and technologies.

Implement DirectAccess.

Implement VPNs.

#### **Module 10: Deploying and managing Windows Server and Hyper-V containers**

Overview of containers in Windows Server 2016

Deploying Windows Server and Hyper-V containers

Installing, configuring, and managing containers by using Docker

#### **Lab : Installing and configuring containers**

Installing and configuring Windows Server containers by using Windows PowerShell

Installing and configuring Windows Server containers by using the Docker engine

After completing this module, students will be able to:

Explain the purpose of Windows Server and Hyper-V containers.

Deploy and manage Windows Server and Hyper-V containers.

Install, configure, and manage containers.

#### **Module 11: Implementing failover clustering**

Overview of failover clustering

Implementing a failover cluster

Configuring highly-available applications and services on a failover cluster

Maintaining a failover cluster

Implementing a stretch cluster

#### **Lab : Implementing failover clustering**

Configuring iSCSI storage

Configuring a failover cluster

Deploying and configuring a highly available file server

Validating the deployment of a highly available file server

Configuring CAU on the failover cluster

After completing this module, students will be able to:

Describe the concept of failover clustering.

Implement a failover cluster.

Configure highly-available applications and services on a failover cluster.

Maintain a failover cluster.

Implement a stretch-failover cluster.

## **Module 12: Implementing failover clustering with Windows Server 2016 Hyper-V**

Overview of the integration of Hyper-V Server 2016 with failover clustering

Implementing Hyper-V virtual machines on failover clusters

Implementing Windows Server 2016 Hyper-V virtual machine migration

Implementing Hyper-V Replica

### **Lab : Implementing failover clustering with Windows Server 2016 Hyper-V**

The Hyper-V Failover clustering testing environment

Configuring Hyper-V Replica

Configuring a failover cluster for Hyper-V

Configuring a highly available virtual machine

After completing this module, students will be able to:

Describe how Windows Server 2016 Hyper-V integrates with failover clustering.

Implement Hyper-V virtual machines on failover clusters.

Implement Hyper-V virtual machine migration.

Implement Hyper-V Replica.

## **INFO**

**Materiale didattico:** Materiale didattico in formato digitale

**Costo materiale didattico:** incluso nel prezzo del corso a Calendario

**Natura del corso:** Operativo (previsti lab su PC)