

# MWS3-3 - MOC 20741 - NETWORKING WITH 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

Progettare e realizzare una rete IPv4.

Implementare il Dynamic Host Configuration Protocol (DHCP).

Implementare IPv6.

Implementare il Domain Name System (DNS).

Implementare e gestire la distribuzione degli indirizzi IP (IPAM).

Pianificare l'accesso remoto.

Implementare il DirectAccess.

Implementare reti private virtuali (VPN).

Implementare networking per le filiali.

Configurare le funzioni di rete avanzate.

Implementare il Software Defined Network.

## PREREQUISITI

Esperienza nell'utilizzo di Windows Server 2008 o Windows Server 2012

Esperienza lavorativa in un ambiente aziendale con infrastruttura Windows Server

Conoscenza del modello OSI

Comprensione dei componenti di un'infrastruttura di rete di base e delle tecnologie legate a: cavi, router, hub e switch

Familiarità con topologie e architetture di rete come: reti locali (LAN), reti geografiche (WAN) e reti wireless

Alcune conoscenze di base relative allo stack del protocollo TCP / IP, all'indirizzamento e alla risoluzione dei nomi

Esperienza e conoscenza di Hyper-V e della virtualizzazione

Esperienza operativa con i sistemi operativi client Windows come Windows 8.1 o Windows 10

## CONTENUTI

### **Module 1: Planning and implementing an IPv4 network**

Planning IPv4 addressing  
Configuring an IPv4 host  
Managing and troubleshooting IPv4 network connectivity

#### **Lab : Planning an IPv4 network**

Planning the IPv4 address assignments

#### **Lab : Implementing and troubleshooting an IPv4 network**

Verifying the IPv4 communication  
Troubleshooting IPv4  
After completing this module, students will be able to:  
Plan IPv4 addressing.  
Configure an IPv4 host.  
Manage and troubleshoot IPv4 network connectivity.

### **Module 2: Implementing DHCP**

Overview of the DHCP server role  
Deploying DHCP  
Managing and troubleshooting DHCP

#### **Lab : Implementing DHCP**

Planning the DHCP server implementation  
Implementing the DHCP configuration  
Validating the DHCP implementation  
After completing this module, students will be able to:  
Explain the DHCP server role.  
Deploy DHCP.  
Manage and troubleshoot DHCP.

### **Module 3: Implementing IPv6**

Overview of IPv6 addressing  
Configuring an IPv6 host  
Implementing IPv6 and IPv4 coexistence  
Transitioning from IPv4 to IPv6

#### **Lab : Configuring and evaluating IPv6 transition technologies**

Reviewing the default IPv6 configuration  
Implementing DHCPv6  
Configuring network integration by using ISATAP  
Configuring native IPv6 connectivity  
Configuring 6to4 connectivity  
After completing this module, students will be able to:  
Describe the features and benefits of IPv6.  
Configure an IPv6 host.  
Implement the coexistence between IPv4 and IPv6 networks.  
Transition from an IPv4 network to an IPv6 network.

### **Module 4: Implementing DNS**

Implementing DNS servers

Configuring zones in DNS

Configuring name resolution between DNS zones

Configuring DNS integration with Active Directory Domain Services (AD DS)

Configuring advanced DNS settings

#### **Lab : Planning and implementing name resolution by using DNS**

Planning DNS name resolution

Implementing DNS servers and zones

#### **Lab : Integrating DNS with AD DS**

Integrating DNS with AD DS

#### **Lab : Configuring advanced DNS settings**

Configuring DNS policies

Validating the DNS implementation

Troubleshooting DNS

After completing this module, students will be able to:

Implement DNS servers.

Configure zones in DNS.

Configure name resolution between DNS zones.

Configure DNS integration with AD DS.

Configure advanced DNS settings.

### **Module 5: Implementing and managing IPAM**

Overview of IPAM

Deploying IPAM

Managing IP address spaces by using IPAM

#### **Lab : Implementing IPAM**

Installing the IPAM Server feature

Provisioning the IPAM Server

Managing IP address spaces by using IPAM

After completing this module, students will be able to:

Describe the IPAM functionality and components.

Deploy IPAM.

Manage IP address spaces by using IPAM.

### **Module 6: Remote access in Windows Server 2016**

Overview of remote access

Implementing Web Application Proxy

#### **Lab : Implementing Web Application Proxy**

Implementing Web Application Proxy

Validating the Web Application Proxy deployment

After completing this module, students will be able to:

Describe remote access.

Implement Web Application Proxy.

### **Module 7: Implementing DirectAccess**

Overview of DirectAccess

Implementing DirectAccess by using the Getting Started Wizard

Implementing and managing an advanced DirectAccess infrastructure

**Lab : Implementing DirectAccess by using the Getting Started Wizard**

Verifying readiness for a DirectAccess deployment

Configuring DirectAccess

Validating the DirectAccess deployment

**Lab : Deploying an advanced DirectAccess solution**

Preparing the environment for DirectAccess

Implementing the advanced DirectAccess infrastructure

Validating the DirectAccess deployment

After completing this module, students will be able to:

Explain DirectAccess and how it works.

Implement DirectAccess by using the Getting Started Wizard.

Implement and manage an advanced DirectAccess infrastructure.

**Module 8: Implementing VPNs**

Planning VPNs

Implementing VPNs

**Lab : Implementing a VPN**

Implementing a VPN

Validating the VPN deployment

Troubleshooting VPN access

After completing this module, students will be able to:

Plan for a VPN solution.

Implement VPNs.

**Module 9: Implementing networking for branch offices**

Networking features and considerations for branch offices

Implementing Distributed File System (DFS) for branch offices

Implementing BranchCache for branch offices

**Lab : Implementing DFS for branch offices**

Implementing DFS

Validating the deployment

**Lab : Implementing BranchCache**

Implementing BranchCache

Validating the deployment

After completing this module, students will be able to:

Describe the networking features and considerations for branch offices.

Implement DFS for branch offices.

Implement BranchCache for branch offices.

**Module 10: Configuring advanced networking features**

Overview of high performance networking features

Configuring advanced Microsoft Hyper-V networking features

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

Creating and using Hyper-V virtual switches

Configuring and using the advanced features of a virtual switch

After completing this module, students will be able to:

Describe the high performance networking enhancements in Windows Server 2016.

Configure the advanced Microsoft Hyper-V networking features.

### **Module 11: 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.

### **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)