

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)