MWS3-3 - MOC 20741 - NETWORKING WITH WINDOWS SERVER 2016

Categoria: **Windows Server 2016**

INFORMAZIONI SUL CORSO

Durata:	Categoria:	Qualifica Istruttore:	Dedicato a:	Produttore:
5 Giorni	Windows Server 2016	Microsoft Certified Trainer	Professionista IT	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)