

OD20741B: Networking with Windows Server 2016 MOD

Course Details

Course Outline

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

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

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

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

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

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

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

8. Implementing VPNs

- Planning VPNs
- Implementing VPNs
- **Lab : Implementing a VPN**
- Implementing a VPN
- Validating the VPN deployment
- Troubleshooting VPN access

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

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

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