

Networking with Windows Server 2016

Course: 20741

Course Details

Audience(s): IT Professional(s)

Technology: Windows Server 2016

Duration: 40 Hours

ABOUT THIS COURSE

This 40-Hours classroom-based course provides the fundamental networking skills required to deploy and support Windows Server 2016 in most organizations. It covers IP fundamentals, remote access technologies, and more advanced content including Software Defined Networking.

AUDIENCE PROFILE

This course is intended for existing IT professionals who have some networking knowledge and experience and are looking for a single course that provides insight into core and advanced networking technologies in Windows Server 2016. This audience would typically include:

- Network administrators who are looking to reinforce existing skills and learn about new networking technology changes and functionality in Windows Server 2016.
- System or Infrastructure Administrators with general networking knowledge who are looking to gain core and advanced networking knowledge and skills on Windows Server 2016.

Course Content

Module 1: Planning and implementing an IPv4 network

Lessons

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

Lab: Planning an IPv4 network

Lab: Implementing and troubleshooting an IPv4 network

Module 2: Implementing DHCP

Lessons

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

Lab: Implementing DHCP

Module 3: Implementing IPv6

Lessons

- 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

Module 4: Implementing DNS

Lessons

- 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

Lab: Integrating DNS with Active Directory

Lab: Configuring advanced DNS settings

Module 5: Implementing and managing IPAM

Lessons

- Overview of IPAM
- Deploying IPAM
- Managing IP address spaces by using IPAM

Lab: Implementing IPAM

Module 6: Remote access in Windows Server 2016

Lessons

- Overview of remote access
- Implementing the Web Application Proxy

Lab: Implementing Web Application Proxy

Module 7: Implementing DirectAccess

Lessons

- 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

Lab: Deploying an advanced DirectAccess solution

Module 8: Implementing VPNs

Lessons

- Planning VPNs
- Implementing VPNs

Lab: Implementing VPN

Module 9: Implementing networking for branch offices

Lessons

- 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

Lab: Implementing BranchCache

Module 10: Configuring advanced networking features

Lessons

- Overview of high performance networking features
- Configuring advanced Microsoft Hyper-V networking features

Lab: Configuring advanced Hyper-V networking features

Module 11: Implementing Software Defined Networking

Lessons

- Overview of SDN.
- Implementing network virtualization
- Implementing Network Controller

Lab: Deploying Network Controller

At This Course Completion

At completing this course the student will be able to:

- Plan and implement an IPv4 network.
- Implement Dynamic Host Configuration Protocol (DHCP).
- Implement IPv6.
- Implement Domain Name System (DNS).
- Implement and manage IP address management (IPAM).
- Plan for remote access.
- Implement DirectAccess.
- Implement virtual private networks (VPNs).
- Implement networking for branch offices.
- Configure advanced networking features.
- Implement Software Defined Networking.