

20741 Networking with Windows Server 2016

Overview

This course provides the fundamental networking skills required to deploy & support Windows Server 2016 in most organizations. It covers IP fundamentals, remote access technologies, & more advanced content including software defined networking.

Prerequisite Comments

In addition to professional experience, students who attend this training should already have the following technical knowledge: Experience working with Windows Server 2008 or Windows Server 2012; Experience working in a Windows Server infrastructure enterprise environment; Knowledge of the Open Systems Interconnection (OSI) model; Understanding of core networking infrastructure components and technologies such as cabling, routers, hubs, and switches; Familiarity with networking topologies and architectures such as local area networks (LANs), wide area networks (WANs) and wireless networking; Some basic knowledge of the TCP/IP protocol stack, addressing and name resolution; Experience with and knowledge of Hyper-V and virtualization; Hands-on experience working with the Windows client operating systems such as Windows 8.1 or Windows 10

Target Audience

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. The secondary audience for this course is those IT professionals who are looking to take the MCSA 70-741: Networking with Windows Server 2016 exam.

Course Objectives

- After completing this course, students 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.

[Register Online](#)

Schedule

Class Length: 5 Days

G2R = "Guaranteed to Run" | OLL = "Online LIVE"
ILT = "Instructor-Led-Training"

| | | | | | |
|----------|-----|------------------|------------|-----|------------|
| 03/15/21 | G2R | 10:00AM - 6:00PM | Global COL | OLL | \$2,975.00 |
|----------|-----|------------------|------------|-----|------------|

Implement software defined networking.

Course Outline

1 - Planning & Implementing an Ipv4 Network

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

2 - Implementing DHCP

Overview of the DHCP server role
Deploying DHCP
Managing and troubleshooting DHCP
Lab: Implementing DHCP

3 - Implementing IPv6

Overview of IPv6 addressing
Configuring an IPv6 host
Implementing IPv6 and IPv4 coexistence
Transitioning from IPv4 to IPv6
Lab: Implementing IPv6
Lab: Configuring and evaluating IPv6 transition technologies

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
Lab: Integrating DNS with Active Directory
Lab: Configuring advanced DNS settings

5 - Implementing & Managing IPAM

IPAM overview
Deploying IPAM
Managing IP address spaces by using IPAM
Lab: Implementing IPAM

6 - Remote Access in Windows Server 2016

Remote access overview
Implementing Web Application Proxy
Lab: Implementing Web Application Proxy

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
Lab: Deploying an advanced DirectAccess solution

8 - Implementing VPNs

Planning VPNs
Implementing VPNs
Lab: Implementing a VPN
Lab: 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
Lab: Implementing BranchCache

10 - Configuring Advanced Networking Features

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

11 - Implementing Software-Defined Networking

Overview of software defined networking
Implementing network virtualization
Implementing Network Controller
Lab: Implementing Network Controller