

NETWORKING WITH WINDOWS SERVER 2016

Course Code: 821526

Determine how to configure advanced networking features of Windows Server 2016.

In this course, you will learn the fundamental networking skills required to deploy and support Windows Server 2016 in most organizations. You will review IP fundamentals, remote access technologies, and more advanced content including software-defined networking (SDN).

What You'll Learn

- 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
- Implement software defined networking

Who Needs to Attend

- IT professionals who have some networking knowledge and experience who are looking for insight into core and advanced networking technologies in Windows Server 2016
- 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

Prerequisites

- 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
- An 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

NETWORKING WITH WINDOWS SERVER 2016

Course Code: 821526

CLASSROOM LIVE

\$2,995 CAD

5 Day

Classroom Live Outline

1. Planning and Implementing an IPv4 Network
 - Planning IPv4 addressing
 - Configuring an IPv4 host
 - Managing and troubleshooting IPv4 network connectivity
2. Implementing DHCP
 - Overview of the DHCP server role
 - Deploying DHCP
 - Managing and troubleshooting DHCP
3. Implementing IPv6
 - Overview of IPv6 addressing
 - Configuring an IPv6 host
 - Implementing IPv6 and IPv4 coexistence
 - Transitioning from IPv4 to IPv6
4. Implementing DNS
 - Configuring zones in DNS
 - Configuring name resolution between DNS zones
 - Configuring DNS integration with Active Directory Domain Services (AD DS)
 - Configuring advanced DNS settings
5. Implementing and Managing IPAM
 - IPAM overview
 - Deploying IPAM
 - Managing IP address spaces by using IPAM
6. Remote Access in Windows Server 2016
 - Remote access overview
 - 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
8. Implementing VPNs
 - Planning VPNs
 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
 10. Configuring Advanced Networking Features
 - Overview of high performance networking features
 - Configuring advanced Hyper-V networking features
 11. Implementing Software-Defined Networking (SDN)
 - Overview of SDN
 - Implementing network virtualization
 - Implementing Network Controller

Classroom Live Labs

- Lab 1: Planning an IPv4 Network
- Lab 2: Implementing and Troubleshooting an IPv4 network
- Lab 3: Implementing DHCP
- Lab 4: Configuring and Evaluating IPv6 Transition Technologies
- Lab 5: Planning and Implementing Name Resolution by Using DNS
- Lab 6: Integrating DNS with Active Directory
- Lab 7: Configuring Advanced DNS Settings
- Lab 8: Implementing IPAM
- Lab 9: Implementing Web Application Proxy
- Lab 10: Implementing DirectAccess by Using the Getting Started Wizard
- Lab 11: Deploying an Advanced DirectAccess Solution
- Lab 12: Implementing a VPN
- Lab 13: Implementing DFS for Branch Offices
- Lab 14: Implementing BranchCache
- Lab 15: Configuring Advanced Hyper-V Networking Features
- Lab 16: Deploying Network Controller

NETWORKING WITH WINDOWS SERVER 2016

Course Code: 821526

VIRTUAL CLASSROOM LIVE

\$2,995 CAD

5 Day

Virtual Classroom Live Outline

1. Planning and Implementing an IPv4 Network
 - Planning IPv4 addressing
 - Configuring an IPv4 host
 - Managing and troubleshooting IPv4 network connectivity
2. Implementing DHCP
 - Overview of the DHCP server role
 - Deploying DHCP
 - Managing and troubleshooting DHCP
3. Implementing IPv6
 - Overview of IPv6 addressing
 - Configuring an IPv6 host
 - Implementing IPv6 and IPv4 coexistence
 - Transitioning from IPv4 to IPv6
4. Implementing DNS
 - Configuring zones in DNS
 - Configuring name resolution between DNS zones
 - Configuring DNS integration with Active Directory Domain Services (AD DS)
 - Configuring advanced DNS settings
5. Implementing and Managing IPAM
 - IPAM overview
 - Deploying IPAM
 - Managing IP address spaces by using IPAM
6. Remote Access in Windows Server 2016
 - Remote access overview
 - 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
8. Implementing VPNs
 - Planning VPNs
 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
 10. Configuring Advanced Networking Features
 - Overview of high performance networking features
 - Configuring advanced Hyper-V networking features
 11. Implementing Software-Defined Networking (SDN)
 - Overview of SDN
 - Implementing network virtualization
 - Implementing Network Controller

Virtual Classroom Live Labs

- Lab 1: Planning an IPv4 Network
- Lab 2: Implementing and Troubleshooting an IPv4 network
- Lab 3: Implementing DHCP
- Lab 4: Configuring and Evaluating IPv6 Transition Technologies
- Lab 5: Planning and Implementing Name Resolution by Using DNS
- Lab 6: Integrating DNS with Active Directory
- Lab 7: Configuring Advanced DNS Settings
- Lab 8: Implementing IPAM
- Lab 9: Implementing Web Application Proxy
- Lab 10: Implementing DirectAccess by Using the Getting Started Wizard
- Lab 11: Deploying an Advanced DirectAccess Solution
- Lab 12: Implementing a VPN
- Lab 13: Implementing DFS for Branch Offices
- Lab 14: Implementing BranchCache
- Lab 15: Configuring Advanced Hyper-V Networking Features
- Lab 16: Deploying Network Controller



NETWORKING WITH WINDOWS SERVER 2016

Course Code: 821526

PRIVATE GROUP TRAINING

5 Day

Visit us at www.globalknowledge.com or call us at 1-866-716-6688.

Date created: 4/24/2025 11:18:22 PM

Copyright © 2025 Global Knowledge Training LLC. All Rights Reserved.