

## #20741: NETWORKING WITH WINDOWS SERVER 2016

Available Dates: **Feb 4-11, Apr 1-5, Jun 3-7**

Class Length: **5 day**

Cost:

[Email Computer Visions about this class](#)

### **Class Outline:**

Description:

This 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.

Course Outline:

#### Module 1: Planning and implementing an IPv4 network

This module explains how to plan and implement an IPv4 addressing scheme to support organizational needs. This module also explains how to use fundamental networking tools and techniques to configure and troubleshoot IPv4-based networks.

Lessons

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

#### Module 2: Implementing DHCP

This module explains how to plan and implement DHCP to support the IPv4 infrastructure.

Lessons

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

#### Module 3: Implementing IPv6

This module explains how to implement IPv6, and how to integrate IPv6 and IPv4 networks.

Lessons

- Overview of IPv6 addressing
- Configuring an IPv6 host
- Implementing IPv6 and IPv4 coexistence
- Transitioning from IPv4 to IPv6

#### Module 4: Implementing DNS

This module explains how to install, configure, and troubleshoot DNS within the organization's network.

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

#### Module 5: Implementing and managing IPAM

This module explains how to implement and manage the IPAM feature in Windows Server 2016. This module also explains how to use IPAM to manage services such as DHCP and DNS.

Lessons

- Overview of IPAM
- Deploying IPAM

- Managing IP address spaces by using IPAM

#### Module 6: Remote access in Windows Server 2016

This module explains how to plan for remote access in Windows Server 2016 and how to implement Web Application Proxy.

##### Lessons

- Overview of remote access
- Implementing Web Application Proxy

#### Module 7: Implementing DirectAccess

This module explains how to implement and manage DirectAccess in Windows Server 2016.

##### Lessons

- Overview of DirectAccess
- Implementing DirectAccess by using the Getting Started Wizard
- Implementing and managing an advanced DirectAccess infrastructure

#### Module 8: Implementing VPNs

This module explains how to implement and manage remote access in Windows Server 2016 by using VPNs.

##### Lessons

- Planning VPNs
- Implementing VPNs

#### Module 9: Implementing networking for branch offices

This module explains how to implement network services for branch offices.

##### Lessons

- Networking features and considerations for branch offices
- Implementing Distributed File System (DFS) for branch offices
- Implementing BranchCache for branch offices

#### Module 10: Configuring advanced networking features

This module explains how to implement an advanced networking infrastructure.

##### Lessons

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

#### Module 11: Implementing Software Defined Networking

This module explains how to implement software defined networking.

##### Lessons

- Overview of Software Defined Networking
- Implementing network virtualization
- Implementing Network Controller