

Training: Microsoft  
MS-55349 Networking with Windows Server

## TRAINING GOALS:

This five-day instructor-led course examines the services and features of Microsoft Windows Server from 2012 to 2022, including lessons and lab exercises on key attributes you'll need on the job. It's designed for IT professionals who have some networking knowledge and experience, and who are looking for a single course that provides insight into core and advanced Windows Server networking technologies. This audience typically includes network administrators and system and infrastructure administrators.

### Audience profile:

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### At Course Completion:

- Plan and implement IPv4.
- Implement Dynamic Host Configuration Protocol (DHCP).
- Plan and implement IPv6.
- Implement name resolution with Domain Name System (DNS).
- Implement and manage IP Address Management (IPAM).
- Plan and implement remote access.
- Implement networking for branch offices.
- Configure advanced networking features.

## CONSPECT:

- Module 1: Plan and implement IPv4
  - Plan IPv4 addressing
  - Configure IPv4
  - Manage and troubleshoot IPv4
  - Lab 1: Plan an IPv4 addressing scheme

- Module 2: Implement DHCP
  - What is DHCP?
  - Deploy DHCP
  - Manage DHCP high availability
  - Manage and troubleshoot DHCP
  - Lab 1: Implement DHCP
- Module 3: Plan and implement IPv6
  - Implement IPv6
  - Manage IPv4 and IPv6 Coexistence
  - Migrate to IPv6
  - Lab 1: Configure and evaluate IPv6 transition technologies
- Module 4: Implement name resolution with DNS
  - Deploy DNS servers
  - Configure zones in DNS server
  - Configure nameresolution between DNS zones
  - Configure DNS integration with AD DS
  - Configure advanced DNS settings
  - Lab 1: Plan and implement DNS name resolution
  - Lab 2: Integrate DNS with AD DS
  - Lab 3: Configure advanced DNS settings
- Module 5: Implement and manage IPAM
  - What is IPAM?
  - Deploy IPAM
  - Manage IP address spaces with IPAM
  - Lab 1: Implement IPAM
- Module 6: Implement remote access
  - Overview of remote access options
  - Implement WAP
  - Plan VPNs
  - Lab 1: Implement a Web Application Proxy
  - Lab 2: Implement a VPN
- Module 7: Implement branch office networking
  - Networking features and considerations for branch offices
  - Implement DFSR
  - Implement BranchCache for branch offices
  - Lab 1: Implement DFS for branch offices

- Lab 2: Implement BranchCache
- Module 8: Implement advanced networking
  - Overview of high-performance networking features
  - Configure advanced Hyper-V networking features
  - Lab 1: Configure advanced Hyper-V networking features

## REQUIREMENTS:

- Experience installing PC hardware and devices.
- Knowledge of the TCP/IP protocol stack, addressing, and name resolution.
- Understanding of networking-infrastructure components, 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.
- Knowledge of TCP/IP protocol stack, addressing, and name resolution.
- Practical experience with Windows Server.
- Practical experience with Windows Server Hyper-V.
- Practical experience with Windows 10 or Windows 11.

## Difficulty level



## CERTIFICATE:

Certificate of completing an authorized Microsoft training

## TRAINER:

Microsoft Certified Trainer