

NETLOGIC TRAINING CENTER

Course Training

Networking with Windows Server 2016 (70-741)

Course Content

This 5-day 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.

Course Objective

By the end of the course, you should be able to meet the following objectives:

- 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.

Course Prerequisite

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
- Students can meet the prerequisites by attending the following courses, or by having knowledge and skills equivalent to: 10967A: Fundamentals of a Windows Server Infrastructure

Course Pre-Test

Not Required

Course Details

Day 1

Item	Subject	Details	Personal Lab and devices	Workgroup Lab and devices
1	Planning and implementing an IPv4 network	<ul style="list-style-type: none"> • Planning IPv4 addressing • Configuring an IPv4 host • Managing and troubleshooting IPv4 network connectivity • Lab : Planning an IPv4 network • Planning the IPv4 address assignments 	Theory and Lecture	
Break				
2	Implementing DHCP	<ul style="list-style-type: none"> • Overview of the DHCP server role • Deploying DHCP • Managing and troubleshooting DHCP 	Theory and Lecture	
3	Implementing IPv6	<ul style="list-style-type: none"> • Overview of IPv6 addressing • Configuring an IPv6 host • Implementing IPv6 and IPv4 coexistence • Transitioning from IPv4 to IPv6 	Theory and Lecture	
	Summary challenge advance lab for Implementing , troubleshooting an IPv4 , IPv6 network and DHCP	<p>Lab 1</p> <ul style="list-style-type: none"> - Verifying IPv4 - Troubleshooting IPv4 <p>Lab 2</p> <ul style="list-style-type: none"> - Planning a DHCP server implementation - Implementing the DHCP configuration - Validating the DHCP implementation <p>Lab 3</p> <ul style="list-style-type: none"> - Reviewing the default IPv6 configuration - Implementing DHCPv6 - Configuring network integration by using ISATAP - Configuring native IPv6 connectivity - Configuring 6to4 connectivity 	<p>(Lab 1 to 3)</p> <p>Real Device</p> <p>Catalyst 3560-CX 1 Unit Cisco UCS Server C-Series ESXi 6.5 trial version VMWare vSphere Windows server 2016 trial version</p>	

Day 2

Item	Subject	Details	Trainee Lab and devices	Workgroup Lab and devices
4	Implementing DNS	<ul style="list-style-type: none"> • 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 	Theory and Lecture	
Break				
5	Implementing and managing IPAM	<ul style="list-style-type: none"> • Overview of IPAM • Deploying IPAM • Managing IP address spaces by using IPAM 	Theory and Lecture	
	Summary challenge advance lap for Planning and implementing DNS Advance feature and IPAM	<p>Lab 1</p> <ul style="list-style-type: none"> - Planning DNS name resolution - Implementing DNS servers and zones - Integrating DNS with Active Directory <p>Lab 2</p> <ul style="list-style-type: none"> - Configuring DNS policies - Validating the DNS implementation - Troubleshooting DNS <p>Lab 3</p> <ul style="list-style-type: none"> - Installing the IPAM Server feature - Provisioning the IPAM Server - Managing IP address spaces by using IPAM 	<p>(Lab 1 to 3)</p> <p>Real Device</p> <p>Catalyst 3560-CX 1 Unit Cisco UCS Server C-Series ESXi 6.5 trial version VMWare vSphere Windows server 2016 trial version</p>	

Day 3

Item	Subject	Details	Trainee Lab and devices	Workgroup Lab and devices
6	Remote access in Windows Server 2016	<ul style="list-style-type: none"> • Overview of remote access • Implementing the Web Application Proxy 	Theory and Lecture	
Break				
7	Implementing DirectAccess	<ul style="list-style-type: none"> • Overview of DirectAccess • Implementing DirectAccess by using the Getting Started Wizard • Implementing and managing an advanced DirectAccess infrastructure 	Theory and Lecture	
	Summary challenge advance lap for Implementing Web Application Proxy and DirectAccess Wizard and Advance feature	<p>Lab 1</p> <ul style="list-style-type: none"> - Implementing Web Application Proxy - Validating the Web Application Proxy deployment <p>Lab 2</p> <ul style="list-style-type: none"> - Verifying readiness for a DirectAccess deployment - Configuring DirectAccess - Validating the DirectAccess deployment <p>Lab 3</p> <ul style="list-style-type: none"> - Preparing the environment for DirectAccess - Implementing the advanced DirectAccess infrastructure - Validating the DirectAccess deployment 	<p>(Lab 1 to 3)</p> <p>Real Device</p> <p>Catalyst 3560-CX 1 Unit Cisco UCS Server C-Series ESXi 6.5 trial version VMWare vSphere Windows server 2016 trial version</p>	

Day 4

Item	Subject	Details	Trainee Lab and devices	Workgroup Lab and devices
8	Implementing VPNs	<ul style="list-style-type: none">• Planning VPNs• Implementing VPNs	Theory and Lecture	
Break				
9	Implementing networking for branch offices	<ul style="list-style-type: none">• Networking features and considerations for branch offices• Implementing Distributed File System (DFS) for branch offices• Implementing BranchCache for branch offices	Theory and Lecture	
	Summary challenge advance lap for Implementing VPN and Implementing DFS for branch offices	Lab 1 - Implementing VPN - Validating the VPN deployment - Troubleshooting VPN access Lab 2 - Implementing DFS - Validating the deployment - Implementing BranchCache - Validating the deployment	(Lab 1 and 2) Real Device Catalyst 3560-CX 1 Unit Cisco UCS Server C-Series ESXi 6.5 trial version VMWare vSphere Windows server 2016 trial version	

Day 5

Item	Subject	Details	Trainee Lab and devices	Workgroup Lab and devices
10	Configuring advanced networking features	<ul style="list-style-type: none">• Overview of high performance networking features• Configuring advanced Microsoft Hyper-V networking features	Theory and Lecture	
Break				
11	Implementing Software Defined Networking	<ul style="list-style-type: none">• Overview of SDN.• Implementing network virtualization• Implementing Network Controller	Theory and Lecture	
	Summary challenge advance lap for Configuring advanced Hyper-V networking features and Deploying network controller	Lab 1 - Creating and using Hyper-V virtual switches - Configuring and using the advanced features of a virtual switch Lab 2 - Preparing to deploy Network Controller - Deploying Network Controller	(Lab 1.2 and 3) Real Device Catalyst 3560-CX 1 Unit Cisco UCS Server C-Series ESXi 6.5 trial version VMWare vSphere Windows server 2016 trial version	

Course Post-Test

Not Required

Course Materials

Not include in this class training (but you can requested from sale team)

Course Devices Training (Per 1 Person)



Cisco Server UCS C-Series



Cisco Catalyst 3560-CX



Storage QNAP

