



MICROSOFT TRAINING

Microsoft Software Defined Networking

Implement and manage Microsoft Software Defined Networking (SDN) solutions. Build flexible, scalable, and secure data center networks.

DURATION

2 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

-
- Globally Recognized Certification
 - Expert-Led Hands-On Training
 - Flexible Scheduling

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COURSE OVERVIEW

This intermediate-level course on Microsoft Software Defined Networking (SDN) provides a comprehensive deep dive into leveraging Microsoft technologies to build agile, scalable, and secure network infrastructures. You will explore the foundational concepts of SDN, understand how it revolutionizes traditional networking, and gain hands-on proficiency with Microsoft's robust suite of SDN components. This includes mastering the Network Controller, configuring Hyper-V Virtual Switches, deploying network virtualization, and implementing various SDN policies to automate and manage complex data center networks.

By completing this 2-hour intensive program, IT professionals will acquire critical skills to design, deploy, and manage Software Defined Networks within Windows Server environments, particularly focusing on hybrid cloud scenarios and Azure Stack HCI. The course emphasizes practical application, enabling you to optimize network performance, enhance security through micro-segmentation, and achieve greater operational efficiency. Mastering Microsoft SDN not only future-proofs your skill set but also positions you as an invaluable asset capable of transforming traditional IT into a dynamic, cloud-ready infrastructure.

Duration	2 hours
Level	Intermediate
Vendor	Microsoft

COURSE CURRICULUM

01 Module 1: Introduction to Software Defined Networking and Microsoft's Vision

- Understanding traditional networking limitations
- Introduction to SDN concepts and architecture
- Benefits of SDN: automation, agility, cost reduction
- Overview of Microsoft SDN stack and components
- SDN use cases in Windows Server and Azure environments

02 Module 2: Core Microsoft SDN Components

- Deep dive into the Network Controller role and functionality
- Deploying and configuring the Network Controller
- Understanding Hyper-V Virtual Switch and its extensions
- Introduction to network virtualization with NVGRE and VXLAN
- Gateway infrastructure for SDN: RAS Gateway and Load Balancer

03 Module 3: Logical Networks and Policies

- Designing and implementing virtual networks and subnets
- Configuring IP Address Management (IPAM) integration
- Applying network security policies and Access Control Lists (ACLs)
- Understanding Quality of Service (QoS) in SDN
- Implementing firewall policies and network micro-segmentation

04 Module 4: Deploying and Managing SDN Solutions

- Automating SDN deployment with PowerShell
- Managing SDN infrastructure using Windows Admin Center
- Integrating SDN with System Center Virtual Machine Manager (SCVMM)
- Troubleshooting common SDN deployment and operational issues

- Monitoring SDN health and performance

05 Module 5: Advanced SDN Scenarios and Hybrid Integration

- Exploring SDN in Azure Stack HCI environments
- Connecting on-premises SDN with Azure Virtual Networks
- Implementing Software Load Balancing (SLB) in SDN
- Designing for high availability and disaster recovery in SDN
- Future trends and developments in Microsoft SDN

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Hybrid Cloud Network Architect**
- > **Data Center Operations Engineer (Microsoft Stack)**
- > **Senior Windows Server Administrator with Networking Specialization**

FREQUENTLY ASKED QUESTIONS

Q: What specific skills will I gain that are directly applicable to managing modern data centers using Microsoft technologies?

This course will equip you with the practical skills to configure and manage the Network Controller, deploy virtual networks and subnets, implement granular network security policies like micro-segmentation, and automate network operations using PowerShell. You'll also learn to integrate SDN with Hyper-V and Windows Server environments, making you proficient in building agile, scalable, and secure network infrastructures that are crucial for today's hybrid cloud data centers.

Q: Is this Microsoft Software Defined Networking course suitable for someone without prior SDN experience, or are there prerequisites?

While this is an intermediate-level course, a foundational understanding of Windows Server administration, Hyper-V virtualization, and basic networking concepts (TCP/IP, routing, firewalls) is highly recommended. The course will introduce SDN concepts from the ground up, but prior familiarity with these core Microsoft technologies will enable you to grasp the advanced SDN topics more effectively and maximize your learning experience.

Q: How does mastering Microsoft SDN through this course enhance my career prospects in a cloud-first world, especially with Azure and hybrid solutions?

Proficiency in Microsoft SDN is a critical differentiator for roles involving Azure and hybrid cloud. This course directly prepares you to design and implement network solutions that bridge on-premises data centers with Azure, leveraging technologies like Azure Stack HCI. You'll be able to manage complex network policies across diverse environments, optimize traffic flow, and ensure consistent security posture, making you an indispensable asset for organizations adopting hybrid cloud strategies and modernizing their infrastructure.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

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50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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