

Windows Server 2019 Administration (5 Days)

About this Course

This five-day instructor-led course is designed primarily for IT professionals who have some experience with Windows Server. It is designed for professionals who will be responsible for managing identity, networking, storage and compute by using Windows Server 2019, and who need to understand the scenarios, requirements, and options that are available and applicable to Windows Server 2019. The course teaches IT professionals the fundamental administration skills required to deploy and support Windows Server 2019 in most organizations.

Audience Profile

This course is intended for Information Technology (IT) Professionals who have some experiencing working with Windows Server and are looking for a single five-day course that covers core administration components and technologies in Windows Server 2019. This course also helps server administrators from previous Windows Server versions to update their knowledge and skills related to Windows Server 2019. Additionally, this course can help individuals looking for preparation materials to pass exams related to Windows Server. The course is also to individuals from a service desk role who wish to transition into server maintenance.

Prerequisites

- Some exposure to and experience with Active Directory Domain Services (AD DS) concepts and technologies in Windows Server 2012 or Windows Server 2016.
- Some exposure to and experience with Active Directory Domain Services (AD DS) concepts and technologies in Windows Server 2012 or Windows Server 2016.
- Experience and an understanding of core networking technologies such as IP addressing, name resolution, and Dynamic Host Configuration Protocol (DHCP).
- Experience working with and an understanding of Microsoft Hyper-V and basic server virtualization concepts.
- An awareness of basic security best practices.
- Experience working hands-on with Windows client operating systems such as Windows 8, Windows 8.1 or Windows 10.
- Basic experience with Windows PowerShell.

Course Outline

Module 1: Windows Server Administration Overview

- Overview of Windows Server administration principles and tools
- Introducing Windows Server 2019
- Windows Server Core Overview

Module 2: Identity Services in Windows Server

- Overview of AD DS
- Deploying Windows Server domain controllers
- Overview of Azure AD
- Implementing Group Policy
- Overview of Active Directory Certificate Services

Module 3: Network Infrastructure services in Windows Server

- Deploying and managing DHCP
- Deploying and managing DNS services
- Deploying and managing IPAM

Module 4: File Servers and Storage management in Windows Server

- Volumes and file systems in Windows Server
- Implementing sharing in Windows Server
- Implementing Storage Spaces in Windows Server
- Implementing Data Deduplication
- Implementing iSCSI
- Deploying Distributed File System

Module 5: Hyper-V virtualization and containers in Windows Server

- Hyper-V in Windows Server
- Configuring VMs
- Securing virtualization in Windows Server
- Containers in Windows Server
- Overview of Kubernetes

Module 6: High Availability in Windows Server

- Planning for failover clustering implementation
- Creating and configuring failover cluster
- Overview of stretch clusters
- High availability and disaster recovery solutions with Hyper-V VMs

Module 7: Disaster recovery in Windows Server

- Hyper-V Replica
- Backup and restore infrastructure in Windows Server

Module 8: Windows Server security

- Credentials and privileged access protection in Windows Server
- Hardening Windows Server
- Just Enough Administration in Windows Server
- Securing and analyzing SMB traffic
- Windows Server update management

Module 9: Remote Desktop Services in Windows Server

- Remote Desktop Services Overview
- Configuring a session-based desktop deployment
- Overview of personal and pooled virtual desktops

Module 10: Remote access and web services in Windows Server

- Overview of RAS in Windows Server
- Implementing VPNs
- Implementing NPS
- Implementing Always On VPN
- Implementing Web Server in Windows Server

Module 11: Monitoring, performance, and troubleshooting

- Overview of Windows Server monitoring tools
- Using Performance Monitor
- Monitoring event logs for troubleshooting

Module 12: Upgrade and migration in Windows Server

- AD DS migration
- Storage Migration Service
- Windows Server migration tools