



REAL WORLD
TECHNOLOGY TRAINING & SOLUTIONS
"Training You Can Really Use"

WS-011T00: Windows Server® 2019 Administration

Duration: 5 Days

Method: Instructor-Led Training (ILT) | Live Online Training

Course Description

This course 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 participants the fundamental administration skills required to deploy and support Windows Server 2019 in most organizations.

Target Audience

This course is intended for:

- Information Technology (IT) Professionals who have some experiencing working with Windows Server and are looking to understand the core administration components and technologies in Windows Server 2019.
- Server administrators from previous Windows Server versions who want to update their knowledge and skills related to Windows Server 2019.
- Individuals from a service desk role who wish to transition into server maintenance.

Prerequisites

To attend this course, candidates must have:

- 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.



Prerequisites *Continued*

- 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 Objectives

Upon successful completion of this course, attendees will be able to:

- Use administrative techniques and tools in Windows Server 2019.
- Implement identity Services.
- Manage network infrastructure services.
- Configure file servers and storage.
- Manage virtual machines using Hyper-V virtualization and containers.
- Implement high availability and disaster recovery solutions.
- Apply security features to protect critical resources.
- Configure Remote Desktop Services.
- Configure a virtual machine-based desktop infrastructure deployment.
- Implement remote access and web services.
- Implement service monitoring and performance monitoring, and apply to troubleshoot.
- Perform upgrades and migration related to AD DS, and storage.

Course Topics

Module 1: Windows Server Administration Overview

- Introducing Windows Server 2019
- Windows Server Core Overview
- Windows Server Administration Principles and Tools Overview

Module 2: Identity Services in Windows Server

- AD DS Overview
- Deploying Windows Server Domain Controllers
- Azure® AD Overview
- Implementing Group Policy
- Active Directory Certificate Services Overview

Module 3: Network Infrastructure Services in Windows Server

- Deploying and Managing DHCP
- Deploying and Managing DNS service
- Deploying and Managing IPAM
- Remote Access Services in Windows Server





Course Topics *Continued*

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
- Hardening Windows Server
- JEA in Windows Server
- Securing and Analysing SMB Traffic
- Windows Server Update Management

Module 9: RDS in Windows Server

- Overview of RDS
- Configuring a Session-Based Desktop Deployment
- Overview of Personal and Pooled Virtual Desktops

Module 10: Remote Access and Web Services in Windows Server

- Implementing VPNs
- Implementing Always On VPN
- Implementing NPS
- Implementing Web Server in Windows Server

Module 11: Server and Performance Monitoring in Windows Server

- 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

LABS INCLUDED