

MS 20740 C: Installation, Storage, And Compute with Windows Server 2016



Days: 5

Prerequisites: Before attending this course, students must have:

- A basic understanding of networking fundamentals.
- An awareness and understanding of security best practices.
- An understanding of basic AD DS concepts.
- Basic knowledge of server hardware.
- Experience supporting and configuring Windows client operating systems such as Windows 8 or Windows 10.

Audience: This course is intended for IT professionals who have some experiencing working with Windows Server, and who are looking for a single five-day course that covers storage and compute technologies in Windows Server 2016. This course will help them update their knowledge and skills related to storage and compute for Windows Server 2016.

Description: This five-day 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 storage and compute by using Windows Server 2016, and who need to understand the scenarios, requirements, and storage and compute options that are available and applicable to Windows Server 2016.

OUTLINE:

MODULE 1: INSTALLING, UPGRADING, AND MIGRATING SERVERS AND WORKLOADS

LESSONS

- Introducing Windows Server 2016
- Preparing and installing Nano Server and Server Core
- Preparing for upgrades and migrations
- Migrating server roles and workloads
- Windows Server activation models

*LAB:INSTALLING AND CONFIGURING NANO
SERVER*

MODULE 2:CONFIGURING LOCAL STORAGE

LESSONS

- Managing disks in Windows Server 2016
- Managing volumes in Windows Server 2016

*LAB:MANAGING DISKS AND VOLUMES IN
WINDOWS SERVER 2016*

MS 20740 C: Installation, Storage, And Compute with Windows Server 2016

MODULE 3:IMPLEMENTING ENTERPRISE STORAGE SOLUTIONS

LESSONS

- Overview of direct-attached storage, network-attached storage, and storage area networks
- Comparing Fibre Channel, iSCSI, and FCoE
- Understanding iSNS, data centre bridging, and MPIO
- Configuring sharing in Windows Server 2016

*LAB:PLANNING AND CONFIGURING
TECHNOLOGIES AND COMPONENTS*

MODULE 4:IMPLEMENTING STORAGE SPACES AND DATA DEDUPLICATION

LESSONS

- Implementing Storage Spaces
- Managing Storage Spaces
- Implementing Data Deduplication

LAB:IMPLEMENTING STORAGE SPACES

LAB:IMPLEMENTING DATA DEDUPLICATION

MODULE 5:INSTALLING AND CONFIGURING HYPER-V AND VIRTUAL MACHINES

LESSONS

- Overview of Hyper-V
- Installing Hyper-V
- Configuring storage on Hyper-V host servers
- Configuring networking on Hyper-V host servers
- Configuring Hyper-V virtual machines
- Managing Hyper-V virtual machines

LAB:INSTALLING AND CONFIGURING HYPER-V

MODULE 6:DEPLOYING AND MANAGING WINDOWS SERVER AND HYPER-V CONTAINERS

LESSONS

- Overview of containers in Windows Server 2016
- Deploying Windows Server and Hyper-V containers
- Installing, configuring, and managing containers

*LAB:INSTALLING AND CONFIGURING
CONTAINERS*

MODULE 7: OVERVIEW OF HIGH AVAILABILITY AND DISASTER RECOVERY

LESSONS

- Defining levels of availability
- Planning high availability and disaster recovery solutions with Hyper-V virtual machines
- Backing up and restoring the Windows Server 2016 operating system and data by using Windows Server B
- High availability with failover clustering in Windows Server 2016

*LAB:PLANNING AND IMPLEMENTING A HIGH
AVAILABILITY AND DISASTER RECOVERY
SOLUTION*

MS 20740 C: Installation, Storage, And Compute with Windows Server 2016

MODULE 8: IMPLEMENTING AND MANAGING FAILOVER CLUSTERING

LESSONS

- Planning a failover cluster
- Creating and configuring a new failover cluster
- Maintaining a failover cluster
- Troubleshooting a failover cluster
- Implementing site high availability with stretch clustering

LAB: IMPLEMENTING A FAILOVER CLUSTER

LAB: MANAGING A FAILOVER CLUSTER

MODULE 9: IMPLEMENTING FAILOVER CLUSTERING FOR HYPER-V VIRTUAL MACHINES

LESSONS

- Overview of integrating Hyper-V in Windows Server 2016 with failover clustering
- Implementing and maintaining Hyper-V virtual machines on failover clusters
- Key features for virtual machines in a cluster environment

*LAB: IMPLEMENTING FAILOVER CLUSTERING
WITH HYPER-V*

MODULE 10: IMPLEMENTING NETWORK LOAD BALANCING

LESSONS

- Overview of NLB clusters
- Configuring an NLB cluster
- Planning an NLB implementation

LAB: IMPLEMENTING AN NLB CLUSTER

MODULE 11: CREATING AND MANAGING DEPLOYMENT IMAGES

LESSONS

- Introduction to deployment images
- Creating and managing deployment images by using MDT
- Virtual machine environments for different workloads

*LAB: USING MDT TO DEPLOY WINDOWS
SERVER 2016*

MODULE 12: MANAGING, MONITORING, AND MAINTAINING VIRTUAL MACHINE INSTALLATIONS

LESSONS

- WSUS overview and deployment options
- Update management process with WSUS
- Overview of PowerShell DSC
- Overview of Windows Server 2016 monitoring tools
- Using Performance Monitor
- Monitoring Event logs

*LAB: IMPLEMENTING WSUS AND DEPLOYING
UPDATES*

*LAB: MONITORING AND TROUBLESHOOTING
WINDOWS SERVER 2016*