

5 Days

20740B: Installation, Storage, and Compute with Windows Server 2016

The 5-days Microsoft 20740B Installation, Storage, and Compute with Windows Server 2016 training course focuses on the advanced version of Windows Server and is primarily based on professionals experienced with Windows Server, who can manage and compute features in Windows Server 2016.

The professionals will learn the skills to manage enterprise storage solutions, Hyper-V Containers, Network Load Balancing (NLB) clusters, virtual machine installations, and disaster recovery technologies that are available and applicable for Windows Server 2016.

The Next Qualifying Exam would be [20741B: Networking With Windows Server 2016](#)

Course Details

Course Outline

Module 1: Installing, upgrading, and migrating servers and workloads

This module describes the preparation and installation of Nano Server and Server Core, migration of server roles, and activation models.

Lessons

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

Module 2: Configuring local storage

This module explains how to manage disks and volumes in Windows Server 2016.

Lessons

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

Module 3: Implementing enterprise storage solutions

This module introduces the direct-attached storage (DAS), network-attached storage (NAS), and storage area networks (SANs), Microsoft Internet Storage Name Service (iSNS) Server, data center bridging, and Multipath I/O (MPIO).

Lessons

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

Module 4: Implementing Storage Spaces and Data Deduplication

This module describes how to implement, manage Storage Spaces and implement Data Deduplication.

Lessons

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

Module 5: Installing and configuring Hyper-V and virtual machines

This module introduces Hyper-V, its configuration, management, and installation.

Lessons

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

Module 6: Deploying and managing Windows Server and Hyper-V containers

This module introduces you to containers in Windows Server 2016.

Lessons

- Windows Server 2016 Containers Overview
- Install, configure, and manage containers
- Deploying Windows Server and Hyper-V containers

Module 7: Overview of high availability and disaster recovery

In this module, students will get an overview of high availability, business continuity, and disaster recovery.

Lessons

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

Module 8: Implementing and managing failover clustering

This module describes how to plan, create, configure, maintain, and troubleshoot a failover cluster.

Lessons

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

Module 9: Implementing failover clustering for Hyper-V virtual machines

This module explains how to integrate Hyper-V virtual machines in a clustered environment and on failover clusters.

Lessons

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

Module 10: Implementing Network Load Balancing

This module introduces NLB clusters, their planning and configuration.

Lessons

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

Module 11: Creating and managing deployment images

This module introduces deployment images and explains how to create and manage deployment images by using the Microsoft Deployment Toolkit (MDT).

Lessons

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

Module 12: Managing, monitoring, and maintaining virtual machine installations

This module introduces WSUS and explains the deployment options. It explains how to use Performance Monitor update and management process with WSUS.

Lessons

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

Who Should Attend

The 20740B course is intended for (IT) professionals who carry relevant knowledge and experience working with Windows operating systems and aspire to acquire the skills necessary to store and compute features in Windows Server 2016.

Pre Requisite

Before attending this course, students must have:

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

Additionally, students would benefit from having Windows Server systems administrator experience.

Exams

Installation, Storage, and Compute with Windows Server 2016 [70-740]

Date - Mar 29, 2024