



MS 20743A Upgrading Your Skills to Windows Server 2016

Price: Call
Length: 35 Hours (5 days)

Introduction: This five-day, instructor-led course explains how to implement and configure new Windows Server 2016 features and functionality. This course is for information technology (IT) professionals who want to upgrade their technical skills from Windows Server 2008 or Windows Server 2012 to Windows Server 2016. This course presumes a high level of knowledge about previous Windows Server technologies and skills equivalent to the Microsoft Certified Solutions Associate (MCSA): Windows Server 2008 or Windows Server 2012 credential.

This course is not a product-upgrade course, detailing considerations for migrating and upgrading students' specific environment to Windows Server 2016. Rather, this course provides updates to students' existing Windows Server knowledge and skills, as they pertain to Windows Server 2016.

Target Audience: This course is for IT professionals who are experienced Windows Server 2012 or Windows Server 2008 system administrators, with real-world experience working in a Windows Server 2008 R2 or Windows Server 2008 enterprise environment. Additionally, students should have obtained the MCSA credential for Windows Server 2008 or Windows Server 2012, or they should have equivalent knowledge.

Prerequisites: Before attending this course, students must have:

- Two or more years of experience with deploying and managing Windows Server 2012 or Windows Server 2008 environments; NS experience with day-to-day Windows Server 2012 or Windows Server 2008 system-administration management and maintenance tasks.
- Experience with Windows networking technologies and implementation.
- Experience with Active Directory technologies and implementation.
- Experience with Windows Server virtualization technologies and implementation.
- Knowledge equivalent to the MCSA credentials of Windows Server 2008 or Windows Server 2012.

Objectives: After completing this course, students will be able to:

- Install and configure Windows Server 2016.
- Describe storage in Windows Server 2016.
- Implement directory services.
- Implement Active Directory Federation Services (AD FS).
- Describe networking.
- Implement Hyper-V.
- Configure advanced networking features.
- Implement software-defined networking.
- Implement remote access.
- Deploy and manage Windows and Hyper-V containers.
- Implement failover clustering.
- Implement failover clustering by using virtual machines.



Course Outline

I. Installing and Configuring Windows Server 2016

- A. Introducing Windows Server 2016
- B. Installing Windows Server 2016
- C. Configuring Windows Server 2016
- D. Preparing for upgrades and migrations
- E. Migrating server roles and workloads
- F. Windows Server activation models

II. Overview of storage in Windows Server 2016

- A. Overview of storage in Windows Server 2016
- B. Configuring Internet SCSI (iSCSI) storage
- C. Configuring the Storage Spaces feature in Windows Server 2016
- D. Implementing the Data Deduplication feature

III. Implementing the Directory Services feature

- A. Deploying AD DS domain controllers
- B. Implementing service accounts
- C. What is Azure AD?

IV. Implementing AD FS

- A. Overview of AD FS
- B. Deploying AD FS
- C. Implementing AD FS for a single organization
- D. Implementing Web Application Proxy
- E. Implementing Azure AD FS SSO with Microsoft Online Services

V. Implementing Network Services

- A. Overview of networking enhancements
- B. Implementing the IP address management
- C. Managing IP address spaces with IPAM

VI. Implementing Hyper-V

- A. Configuring the Hyper-V role in Windows Server 2016
- B. Configuring Hyper-V storage
- C. Configuring Hyper-V networking
- D. Configuring Hyper-V virtual machines

VII. Configuring Advanced Networking Features

- A. Overview of high-performance networking features
- B. Configuring advanced Hyper-V networking features

VIII. Implementing Software Defined Networking

- A. Overview of software-defined networking
- B. Implementing network virtualization
- C. Implementing the Network Controller feature

IX. Implementing Remote Access

- A. Remote access overview
- B. Implementing DirectAccess
- C. Implementing a virtual private network (VPN)

X. Deploying and Managing Windows Server And Hyper-V Containers

- A. Overview of Windows Server 2016 containers
- B. Deploying Windows Server and Hyper-V containers
- C. Installing, configuring, and managing containers

XI. Implementing Failover Clustering

- A. Overview of failover clustering
- B. Implementing a failover cluster
- C. Configuring highly-available applications and services on a failover cluster
- D. Maintaining a failover cluster
- E. Implementing a stretch cluster

XII. Implementing Failover Clustering with Windows Server 2016 Hyper-V

- A. Overview of the integration of Hyper-V Server 2016 with failover clustering
- B. Implementing Hyper-V virtual machines on failover clusters
- C. Implementing Windows Server 2016 Hyper-V virtual machine migration
- D. Implementing the Hyper-V Replica feature