

OD20743C: Upgrading Your Skills to MCSA: Windows Server 2016 MOD

Course Details

Course Outline

1. Installing and configuring Windows Server 2016

- Introducing Windows Server 2016
- Installing Windows Server 2016
- Configuring Windows Server 2016
- Preparing for upgrades and migrations
- Migrating server roles and workloads
- Windows Server activation models
- **Lab : Installing and configuring Nano Server**
- Installing Nano Server
- Completing post-installation tasks on Nano Server

2. Overview of storage in Windows Server 2016

- Overview of storage in Windows Server 2016
- Implementing Data Deduplication
- Configuring iSCSI storage
- Configuring the Storage Spaces feature in Windows Server 2016
- **Lab : Implementing and managing storage**
- Implementing File Server Resource Manager (FSRM)
- Configuring iSCSI storage
- **Lab : Implementing and managing advanced storage solutions**
- Configuring redundant storage spaces
- Implementing the Storage Spaces Direct feature

3. Implementing directory services

- Deploying Active Directory domain controllers
- Implementing service accounts
- Azure AD
- **Lab : Implementing and Managing AD DS**

- Cloning a domain controller
- Implementing service accounts

4. Implementing AD FS

- Overview of AD FS
- Deploying AD FS
- Implementing AD FS for a single organization
- Implementing Web Application Proxy
- Implementing SSO with Microsoft Online Services
- **Lab : Implementing AD FS**
- Installing and configuring AD FS
- Configuring an internal application for AD FS
- **Lab : Implementing Web Application Proxy**
- Implementing Web Application Proxy

5. Implementing network services

- Overview of networking enhancements
- Implementing IPAM
- Managing IP address spaces with IPAM
- **Lab : Implementing network services**
- Configuring DNS policies
- Configuring DHCP failover
- Configuring IPAM

6. Implementing Hyper-V

- Configuring the Hyper-V role in Windows Server 2016
- Configuring Hyper-V storage
- Configuring Hyper-V networking
- Configuring Hyper-V virtual machines
- **Lab : Implementing server virtualization with Hyper-V**
- Installing the Hyper-V server role
- Configuring virtual networking
- Creating and configuring a virtual machine

7. Configuring advanced networking features

- Overview of high-performance networking features

- Configuring advanced Hyper-V networking features
- **Lab : Configuring advanced Hyper-V networking features**
- Creating and using Microsoft Hyper-V virtual switches
- Configuring and using the advanced features of a virtual switch

8. Implementing Software Defined Networking

- Overview of SDN
- Implementing network virtualization
- Implementing Network Controller
- **Lab : Deploying Network Controller**
- Preparing to deploy Network Controller
- Deploying Network Controller

9. Implementing remote access

• Remote access overview

- Implementing DirectAccess
- Implementing VPN
- **Lab : Implementing DirectAccess**
- Configure DirectAccess using the Getting Started Wizard
- Testing DirectAccess

10. Deploying and managing Windows and Hyper-V containers

- Overview of containers in Windows Server 2016
- Preparing to deploy containers
- Installing, configuring, and managing containers by using Docker
- **Lab : Installing and configuring containers**
- Installing Docker

11. Implementing failover clustering

- Overview of failover clustering
- Implementing a failover cluster
- Configuring highly-available applications and services on a failover cluster
- Maintaining a failover cluster
- Implementing a stretch cluster
- **Lab : Implementing failover clustering**
- Configuring iSCSI storage

- Configuring a failover cluster
- Deploying and configuring a highly available file server
- Validating the deployment of a highly available file server
- Configuring CAU on the failover cluster

12. Implementing failover clustering with Windows Server 2016 Hyper-V

- Overview of the integration of Hyper-V Server 2016 with failover clustering
- Implementing Hyper-V virtual machines on failover clusters
- Implementing Windows Server 2016 Hyper-V virtual machine migration
- Implementing Hyper-V Replica
- **Lab : Implementing failover clustering with Windows Server 2016 Hyper-V**
- The Hyper-V Failover clustering testing environment
- Configuring Hyper-V Replica
- Configuring a failover cluster for Hyper-V
- Configuring a highly available virtual machine