

COURSE OUTLINE

70-743: Upgrading Your Skills to Windows Server 2016 MCSA

Module 1: Installing and configuring Windows Server 2016

This module explains how to install and perform post-installation configuration of Windows Server 2016 servers.

- 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
- Installing Nano Server
- Completing post-installation tasks on Nano Server

After completing this course, students will be able to:

- Explain Windows Server 2016.
- Install Windows Server 2016.
- Configure Windows Server 2016.
- Prepare for upgrades and migrations.
- Migrate server roles and workloads.
- Describe the Windows Server activation models.

Module 2: Overview of storage in Windows Server 2016

This module explains how to configure storage in Windows Server 2016.

- Overview of storage in Windows Server 2016
- Configuring Internet SCSI (iSCSI) storage
- Configuring the Storage Spaces feature in Windows Server 2016
- Implementing the Data Deduplication feature
- Implementing File Server Resource Manager (FSRM)
- Configuring iSCSI storage
- Configuring redundant storage spaces

- Implementing the Storage Spaces Direct feature

After completing this module, students will be able to:

- Explain storage in Windows Server 2016.
- Configure iSCSI storage.
- Configure the Storage Spaces feature in Windows Server 2016.
- Implement Data Deduplication.

Module 3: Implementing the Directory Services feature

This module explains how to implement the Directory Services feature.

- Deploying AD DS domain controllers
- Implementing service accounts
- What is Azure AD?
- Cloning an AD DS domain controller
- Implementing service accounts

After completing this module, students will be able to:

- Deploy AD DS domain controllers.
- Implement service accounts.
- Explain Azure AD.

Module 4: Implementing AD FS

This module explains how to implement an AD FS deployment.

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

After completing this module, students will be able to:

- Describe of AD FS.
- Deploy AD FS.
- Implement AD FS for a single organization.
- Implement Web Application Proxy.
- Implement Azure AD FS SSO with Microsoft Online Services.

Module 5: Implementing network services

This module explains how to configure advanced features for Dynamic Host Configuration Protocol (DHCP) and configure IP Address Management (IPAM).

- Overview of networking enhancements
- Implementing the IP address management
- Managing IP address spaces with IPAM
- Configuring DNS policies
- Configuring DHCP failover
- Configuring IPAM

After completing this module, students will be able to:

- Describe networking enhancements.
- Implement IP address management.
- Manage IP address spaces with IPAM.

Module 6: Implementing Hyper-V

This module explains how to install and configure Hyper-V virtual machines.

- Configuring the Hyper-V role in Windows Server 2016
- Configuring Hyper-V storage
- Configuring Hyper-V networking
- Configuring Hyper-V virtual machines
- Installing the Hyper-V server role
- Configuring virtual networking
- Creating and configuring a VM

After completing this module, students will be able to:

- Configure the Hyper-V role in Windows Server 2016.
- Configure Hyper-V storage.
- Configure Hyper-V networking.
- Configure Hyper-V virtual machines.

Module 7: Configuring advanced networking features

This module explains how to implement an advanced networking infrastructure.

- Overview of high-performance networking features
- Configuring advanced Hyper-V networking features
- Creating and using Microsoft Hyper-V virtual switches
- Configuring and using the advanced features of a virtual switch

After completing this module, students will be able to:

- Describe high-performance networking features.
- Configure advanced Hyper-V networking features.

Module 8: Implementing software defined networking

This module explains how to implement software-defined networking.

- Overview of software-defined networking
- Implementing network virtualization
- Implementing the Network Controller feature
- Deploying Network Controller
- Configuring network services with Network Controller
- Managing and monitoring with Network Controller

After completing this module, students will be able to:

- Describe software defined networking.
- Implement network virtualization.
- Implement Network Controller.

Module 9: Implementing remote access

This module explains how to configure connectivity for remote users by using the DirectAccess feature.

- Remote access overview
- Implementing DirectAccess
- Implementing a virtual private network (VPN)
- Configuring DirectAccess by using the Getting Started Wizard
- Testing DirectAccess

After completing this module, students will be able to:

- Describe common remote-access solutions and technologies.
- Implement DirectAccess.
- Implement VPNs.

Module 10: Deploying and managing Windows Server and Hyper-V containers

This module provides an overview of Windows Server 2016 containers. Additionally, it explains how to deploy, install, configure, and manage containers in Windows Server 2016.

- Overview of Windows Server 2016 containers
- Deploying Windows Server and Hyper-V containers
- Installing, configuring, and managing containers
- Installing and configuring Windows Server containers by using Windows PowerShell
- Installing and configuring Windows Server containers by using the Docker engine

After completing this module, students will be able to:

- Explain the purpose of Windows Server and Hyper-V containers.
- Deploy and manage Windows Server and Hyper-V containers.
- Install, configure, and manage containers.

Module 11: Implementing failover clustering

This module explains how to implement failover clustering to provide high availability for network services and applications.

- 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
- 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 the Cluster-Aware Updating feature on the failover cluster

After completing this module, students will be able to:

- Describe the concept of failover clustering.
- Implement a failover cluster.
- Configure highly-available applications and services on a failover cluster.
- Maintain a failover cluster.
- Implement a stretch-failover cluster.

Module 12: Implementing failover clustering with Windows Server 2016 Hyper-V

This module explains how to deploy and manage Hyper-V virtual machines in a failover cluster.

- 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 the Hyper-V Replica feature
- Configuring Hyper-V Replica
- Configuring a failover cluster for Hyper-V
- Configuring a highly available virtual machine

After completing this module, students will be able to:

- Describe how Windows Server 2016 Hyper-V integrates with failover clustering.
- Implement Hyper-V virtual machines on failover clusters.
- Implement Hyper-V virtual machine migration.
- Implement Hyper-V Replica.