20-743 upgrading your skills to windows server 2016

Module 1: Installing and configuring Windows Server 2016 This module explains how to install and perform post-installation configuration of Windows Server 2016 servers.**Lessons**

‹   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

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.**Lessons**

‹   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

After completing this module, students will be able to:

› Explain storage in Windows Server 2016.

› Implement Data Deduplication.

› Configure iSCSI storage.

› Configure the Storage Spaces feature in Windows Server 2016

Module 3: Implementing directory services This module explains how to implement the Directory Services feature.**Lessons**

› Deploying Active Directory domain controllers

› Implementing service accounts

› Azure AD

Lab : Implementing and Managing AD DS

› Cloning a 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.**Lessons**

› 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

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 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).**Lessons**

‹ Overview of networking enhancements

‹ Implementing IPAM

‹ Managing IP address spaces with IPAM

Lab : Implementing network services

‹ 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.**Lessons**

‹ 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

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.**Lessons**

› 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

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.**Lessons**

› Overview of SDN

› Implementing network virtualization

› Implementing Network Controller

Lab : Deploying Network Controller

› Preparing to deploy Network Controller

› Deploying 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.**Lessons**

- Remote access overview
- Implementing DirectAccess
- Implementing VPN

Lab : Implementing DirectAccess

- Configure DirectAccess 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 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.**Lessons**

- 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

After completing this module, students will be able to:

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

Module 11: Implementing failover clustering This module explains how to implement failover clustering to provide high availability for network services and applications.**Lessons**

- 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

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.**Lessons**

‹ 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

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.