20740 Installation, Storage, and Compute with Windows Server 2016

Course Overview

This is a 5-day class

This five-day course is designed primarily for IT professionals who have some experience with Windows Server. It is designed for professionals who will be responsible for managing storage and compute by using Windows Server 2016, and who need to understand the scenarios, requirements, and storage and compute options that are available and applicable to Windows Server 2016.

Who Should Attend

This course is intended for IT professionals who have some experiencing working with Windows Server, and who are looking for a single five-day course that covers storage and compute technologies in Windows Server 2016. This course will help them update their knowledge and skills related to storage and compute for Windows Server 2016.

Course Objectives

After completing this course, students will be able to: - Prepare and install Nano Server, a Server Core installation, and plan a server upgrade and migration strategy. - Describe the various storage options, including partition table formats, basic and dynamic disks, file systems, virtual hard disks, and drive hardware, and explain how to manage disks and volumes. - Describe enterprise storage solutions, and select the appropriate solution for a given situation. - Implement and manage Storage Spaces and Data Deduplication. - Install and configure Microsoft Hyper-V. - Deploy, configure, and manage Windows and Hyper-V containers. - Describe the high availability and disaster recovery technologies in Windows Server 2016. - Plan, create, and manage a failover cluster. - Implement failover clustering for Hyper-V virtual machines. - Configure a Network Load Balancing (NLB) cluster, and plan for an NLB implementation. - Create and manage deployment images. - Manage, monitor, and maintain virtual machine installations.

Upcoming Dates

Date	Time	Where
03/02/2020	11:00AM - 7:00PM	Online LIVE
03/09/2020	9:00AM - 5:00PM	Online LIVE
03/16/2020	9:00AM - 5:00PM	Online LIVE
03/16/2020	9:00AM - 5:00PM	Online LIVE
03/23/2020	9:00AM - 5:00PM	Online LIVE
03/30/2020	11:00AM - 7:00PM	Online LIVE
04/06/2020	11:00AM - 7:00PM	Online LIVE
04/13/2020	9:00AM - 5:00PM	Online LIVE

View All Course Dates & Register Today

Course Outline

1 Installing, upgrading, and migrating servers and workloads

Introducing Windows Server 2016
Preparing and installing Nano Server and Server Core
Preparing for upgrades and migrations
Migrating server roles and workloads
Windows Server activation models
Lab : Installing and configuring Nano Server

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2 Configuring local storage

Managing disks in Windows Server 2016
Managing volumes in Windows Server 2016
Lab : Managing disks and volumes in Windows Server 2016

3 Implementing enterprise storage solutions

Overview of direct-attached storage, network-attached storage, and storage area networks
Comparing Fibre Channel, iSCSI, and FCoE
Understanding iSNS, data centre bridging, and MPIO
Configuring sharing in Windows Server 2016
Lab : Planning and configuring storage technologies and components

4 Implementing Storage Spaces and Data Deduplication

Implementing Storage Spaces
Managing Storage Spaces
Implementing Data Deduplication
Lab : Implementing Storage Spaces
Lab : Implementing Data Deduplication

5 Installing and configuring Hyper-V and virtual machines

Overview of Hyper-V
Installing Hyper-V
Configuring storage on Hyper-V host servers
Configuring networking on Hyper-V host servers
Configuring Hyper-V virtual machines
Managing Hyper-V virtual machines
Lab : Installing and configuring Hyper-V

6 Deploying and managing Windows Server and Hyper-V containers

Overview of containers in Windows Server 2016
Deploying Windows Server and Hyper-V containers
Installing, configuring, and managing containers
Lab : Installing and configuring containers

7 Overview of high availability and disaster recovery

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

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8 Implementing and managing failover clustering

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

9 Implementing failover clustering for Hyper-V virtual machines

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

10 Implementing Network Load Balancing

Overview of NLB clusters
Configuring an NLB cluster
Planning an NLB implementation
Lab : Implementing an NLB cluster

11 Creating and managing deployment images

Introduction to deployment images
Creating and managing deployment images by using MDT
Virtual machine environments for different workloads
Lab : Using MDT to deploy Windows Server 2016

12 Managing, monitoring, and maintaining virtual machine installations

WSUS overview and deployment options
Update management process with WSUS
Overview of PowerShell DSC
Overview of Windows Server 2016 monitoring tools
Using Performance Monitor
Monitoring Event Logs
Lab : Implementing WSUS and deploying updates
Lab : Monitoring and troubleshooting Windows Server 2016