

Supporting Windows server 2016

A 5 day **Hands on** training course



Description

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.



Key outcomes

By the end of the course delegates will be able to:

- ✓ Implement & manage Storage Spaces and Data Deduplication.
- ✓ Deploy, configure, and manage Windows and Hyper-V containers.
- ✓ Implement failover clustering for Hyper-V virtual machines.
- ✓ Configure a NLB cluster and plan for an NLB implementation.
- ✓ Manage, monitor, and maintain virtual machine installations.



Training Approach

This structured course uses Instructor Led Training to provide the best possible learning experience. Small class sizes ensure students benefit from our engaging and interactive style of teaching with delegates encouraged to ask questions throughout the course. Quizzes follow each major section allowing checking of learning. Hands on sessions are used throughout to allow delegates to consolidate their new skills.



Details

Who will benefit?

IT professionals working with Windows server 2016

Prerequisites

None.

Duration: 5 days

Overall rating



Generic Training



Generic training compliments product specific courses covering the complete picture of all relevant devices including the protocols "on the wire".

"Friendly environment with expert teaching that teaches the why before the how."

G.C. Fasthosts

Small Class Sizes



We limit our maximum class size to 8 delegates; often we have less than this. This ensures optimal interactivity between delegates and instructor.

"Excellent course. The small class size was a great benefit..."

M.B. IBM

Hands On Training



The majority of our courses use hands on sessions to reinforce the theory.

"Not many courses have practice added to it. Normally just the theoretical stuff is covered."

J.W. Vodafone

Our Courseware



We write our own courses; courseware does not just consist of slides and our slides are diagrams not bullet point text.

"Comprehensive materials that made the course easy to follow and will be used as a reference point."

V.B. Rockwell Collins

Customise Your Course



Please contact us if you would like a course to be customised to meet your specific requirements. Have the course your way.

"I was very impressed by the combination of practical and theory. Very informative. Friendly approachable environment, lots of hands on."

S.R. Qinetiq

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Course Content

Installing, upgrading, and migrating servers

Installing Nano Server and Server Core, upgrades and migrations, activation models.

Configuring local storage

Volumes and disks in Windows Server 2016, Lab : Managing disks and volumes, Creating and Managing virtual hard disks with Windows PowerShell, Converting virtual hard disks from .vhd to .vhdx, Resizing a volume.

Implementing enterprise storage solutions

Direct-attached storage, network-attached storage, and storage area networks. Comparing Fibre Channel, iSCSI, and FCoE, Understanding iSNS, data centre bridging, and MPIO, Sharing in Windows Server 2016, Lab : Configuring storage technologies and components, Planning storage requirements, Configuring iSCSI, Configuring and managing the share infrastructure.

Storage Spaces and Data Deduplication

Implementing and managing Storage Spaces, Implementing Data Deduplication, Lab : Storage Spaces, storage tiering, Lab : Data Deduplication.

Installing and configuring Hyper-V and VMs

Overview of Hyper-V, Installing Hyper-V, Configuring storage on Hyper-V host servers, Configuring networking on Hyper-V host servers, Configuring and managing Hyper-V VMs. Lab : Installing the Hyper-V server role, Configuring Hyper-V settings, Creating and configuring a VM. Managing a VM by using PowerShell Direct.

Windows Server and Hyper-V containers

Containers in Windows Server 2016, Deploying Windows Server and Hyper-V containers. Lab : Installing and configuring containers with PowerShell and Docker.

Overview of high availability and disaster recovery

Levels of availability, Planning high availability and disaster recovery solutions with Hyper-V VMs, Backing up and restoring the Windows Server 2016 using Windows Server B, High availability with failover clustering in Windows Server 2016. Lab : Planning and implementing a high availability and disaster recovery solution. Determining the appropriate high availability and disaster recovery solution, Implementing storage migration, Implementing Hyper-V Replica.

Implementing and managing failover clustering

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. Creating a failover cluster, Verifying quorum settings and adding a node. Lab : Managing failover clusters, Evicting a node and verifying quorum settings, Changing the quorum from Disk Witness to File Share Witness, and defining node voting, Adding and removing disks from the cluster.

Failover clustering for Hyper-V VMs

Overview of integrating Hyper-V in Windows Server 2016 with failover clustering, Implementing and maintaining Hyper-V VMs on failover clusters, Key features for VMs in a clustered environment. Lab : Implementing failover clustering with Hyper-V. Configuring a failover cluster for Hyper-V, Configuring a highly available VM.

Implementing Network Load Balancing

Overview of NLB clusters, Configuring an NLB cluster, Planning an NLB implementation. Lab : Implementing an NLB cluster. Implementing an NLB cluster, Configuring and managing the NLB cluster. Validating high availability for the NLB cluster.

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. Installing and configuring MDT. Creating and deploying an image

Managing, monitoring, and maintaining VMs

WSUS overview and deployment options, Update management process with WSUS, Overview of PowerShell DSC, Windows Server 2016 monitoring tools, Using Performance Monitor. Monitoring Event Logs. Lab : Implementing WSUS and deploying updates. Implementing WSUS. Configuring update settings. Approving and deploying an update by using WSUS. Lab : Monitoring and troubleshooting Windows Server 2016. Establishing a performance baseline. Identifying the source of a performance problem. Viewing and configuring centralized event logs.

