



Server Virtualization with Windows Server Hyper-V and System Center (74-409)

In association with : **Silver
Microsoft
Partner**



Configure Hyper-V

Create and configure virtual machine (VM) settings

- Configure dynamic memory, configure smart paging, configure Resource Metering, configure guest integration services, create and configure Generation 1 and 2 virtual machines, configure and use extended session mode, and configure RemoteFX

Create and configure virtual machine storage

- Create VHDs and VHDx, configure differencing drives, modify VHDs, configure pass-through disks, manage checkpoints, implement a virtual Fibre Channel adapter, configure storage Quality of Service

Create and configure virtual networks

- Configure Hyper-V virtual switches, optimise network performance, configure MAC addresses, configure network isolation, configure synthetic and legacy virtual network adapters, configure NIC teaming in virtual machines

Configure and manage virtual machine high availability

Configure failover clustering with Hyper-V

- Configure shared storage, configure Quorum, configure cluster networking, restore single node or cluster configuration, implement Cluster Aware Updating, upgrade a cluster, configure and optimise clustered shared volumes and configure clusters without network names

Manage failover clustering roles

- Configure role-specific settings, including continuously available shares, configure VM monitoring, configure failover and preference settings and configure guest clustering

Manage virtual machine movement

- Perform Live Migration, perform quick migration, perform storage migration, import, export and copy VMs; configure virtual machine network health protection, configure drain on shutdown, manage virtual-to-virtual (V2V) migrations and implement virtual machine migration between clouds

Implement a server virtualisation infrastructure

Implement virtualisation hosts

- Implement a delegation of virtualisation environment (hosts, services and virtual machines), including self-service capabilities; implement multi-host libraries, including equivalent objects; implement host resource optimisation; integrate third-party virtualisation platforms; and deploy Hyper-V hosts to bare metal

Implement virtual machines

- Implement highly available VMs; implement guest resource optimisation, including shared VHDx, configure placement rules, create a Virtual Machine Manager template

Implement virtualisation networking

- Configure Virtual Machine Manager logical networks, including virtual switch extensions and logical switches; configure IP address and MAC address settings across multiple Hyper-V hosts, including network virtualisation; configure virtual network optimisation; plan and implement Windows Server Gateway; implement VLANs and pVLANs; plan and implement virtual machine networks; and implement converged networks

Implement virtualisation storage

- Configure Hyper-V host clustered storage; configure Hyper-V virtual machine storage, including virtual Fibre Channel, Internet SCSI (iSCSI) and shared VHDx; plan for storage optimisation; and plan and implement storage by using SMB 3.0 file shares

Manage and maintain a server virtualisation infrastructure

- Manage dynamic optimisation and resource optimisation, integrate Operations Manager with System centre Virtual Machine Manager and System centre Service Manager, update virtual machine images in libraries, implement backup and recovery of a virtualisation infrastructure by using System centre Data Protection Manager (DPM)

Monitor and maintain a server virtualisation infrastructure

Plan and implement a monitoring strategy

- Planning considerations, including monitoring servers using Audit Collection Services (ACS) and System centre Global Service Monitor, performance monitoring, application monitoring, centralised monitoring and centralised reporting; implement and optimise System centre 2012 Operations Manager management packs; and plan for monitoring Active Directory

Plan and implement a business continuity and disaster recovery solution

- Plan a backup and recovery strategy; planning considerations, including Active Directory domain and forest recovery, Hyper-V replica, including using Windows Azure Hyper-V Recovery Manager, domain controller restore and cloning, and Active Directory object and container restore using authoritative restore and Recycle Bin; and plan for and implement backup and recovery by using System centre DPM



Thank You

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