Active Directory : The windows direcotry service that enables adminstrators to create andmanage user and groups set network wide user and computer policies manage security and organize work resources

Active node: A cluster config option that allows deploying a failover cluster without needing active directory for network name management

APIPA : Assigns a class B IP address from 169.254.0.0 to 169.254.255.255 to the client when a DHCP server is either permanently or temporarily unavailable.

Cloud witness : a new quorum witness option introduced in windows server 2016 that allows you to specify a resource in microsoft azure to act as the cluster witness

cluster validation wizard to shit get hit

Compact disk:

Critical updates:

DHCP: Dynamic Host Configuration Protocol (DHCP) is a protocol for assigning dynamic IP addresses to devices on a network. With dynamic addressing, a device can have a different IP address every time it connects to the network.

DHCP guard: option that prevents a VM from acting as a DHCP server. With this option enabled, if the VM sends a DHCP server message on the specified interface, the virtual switc wil drp the packet. This option is most useful when your hyper-v servers are operating in a multtenant environment in which multiple clients are using VMSs hosted on your servers and you have little conrol over waht services they may isntall. It prevents a VM from becoming a rogue DHCP serrver. Be enabled on all servers not the DHCP server. "Get -VM | Set -VMNetworkAdapter -DhcpGaurd on"

Differencing disk uses parent child relationship. A parent disk is a dnamically expanding or fixed size diak with an OS isntalled possibly with some applications and dat. It becomes a aseline for one or more child disks. A VM with a differencing disk operated normallly but any changes made to its hard disk are made only to the differencing disk not the parent. The parent disk shoud not be connected to a VM. You can make several VMs by using teh parent disk as the baseline but using only the additional host disk space of the diffencing disk. Ideal way to provision.

Differencing disk Merge: You can merge a differencing disks contenet into its parent disk or merge the differencing disk with the parent disk with the parent disk to reate a new disk while leaving the orginal parent disk unchanged. Only for diffferencing disks.

Direct-Attached Storage: is a type of local storage in that its connected directly to the server using it. In fact DAS includes hard drives moutned inside the server case. However DAS can also refer to one or more HDDs in an enclosure with its own power supply. In this case the DAS device is connected to a server through a eexternal bus interface, sucah as eSATA small comoputer system interface USB FireWire or Fibre Channel.

DNS: Domain Name server.

Docker container :

Docker Hub repository: Public repository for docker container images

Docker Pull: Pull an image or a repository from a registry

Docker Push: Push an image or a repository to a registry

domain controller: A windows server that has active directory isntalled and is repsobisbe for allowing client lcomputers to acess domain resources

Drainstop:

Dynamically expanding disk: a virtual had disk in which the .vhd file is very samll when created but can expnd as addtional sapce if needed

Event Critical: unrecoverable failure in an application or component

Event Error: A problem that can affect how the application or componenet logging the event function.

Event Information : provision of informaion related to normal operations, such as a service starting or stopping normally.

Event subscription: specifies what server to collect events from what events to collect and the local event log to write them to. (create forwarded events)

Event Viewer : a MMC snap in to review the vents recorded in logs on your local computers as well as other computers on the network.

Event Warning: an issue that doesnt immediately affect operations but might cause future problems if not addressed

External virtual switch: a virtual switch in which one of the hosts physical network adapters is bound to the virual network switch allowing virtual machines to accss a LAN connecto to the host.

failover cluster: Two or more servers appearing as a signle server to clients. One server is considered the active server the other servers ae passive. The active server handles all clint requests for the clustered application, and the passive servers wait in standby mode until the active server fails.

fault tolerance :

Fixed size disk: A virtual hard disk in whicih the disks full size is allocated on the host system when its created.

Forwarded Events

gpupdate /force:

Heartbeat : a signal sent between clusttr nodes informin gthem that a node is up and running.

Hyper-V container : an application environment that provides OS and kernel isolation like a traditional VM but is not managed by Hyper-V manager.

Hyper-V Live Migration

Internal virtual switch : a virtual switch that idsn bound to any of the hosts physical NICs however a host virtual NIC is bound to the internal virutal switch, which allows virtual machines and host computer to communicate whith one another but VMs can't access the physical network.

load balancing: a feature of NIC teaming that distributes traffic between twwo or more interfaces, providing an increase in overall network throughput that server is able to maintain

Local storage: storage media with a direct and exclusive connnection to the computer system borad through disk controller

MAC address spoofing :

malware signatures:A unique string of bits, or the binary pattern, of a virus. The virus signature is like a fingerprint in that it can be used to detect and identify specific viruses. Anti-virus software uses the virus signature to scan for the presence of malicious code.

member server is a windos server that in the management scope of a windows domain but doesnt hav active directory installed

Multicast: A network ommunication method for delivering data to multiple comoputers on a network simultaneously.

Namespace The parts of the operating system that a specific application ccan see and interact with, such as the file system and the network.

namespace isolation: an isolated environment that allows containorized applications to have thier own cop of critical OS

Nano Server

Nano Server image binaries:

nested virtualization : the ability to run a virtual machine on a virtual machine

Network Attached Storage: a storage device that has an enclosure a poer supply slots for multiple HDDs a network interfac and a built in OS tailored for managing shared files and folders

NIC teaming : a network interface configuration that allows multiple network interfaces to work in tandem to provide increased bandwidth load balancing and fault talerance

NLB:

NLB Port rules

NTFS

Passive node : a cluster member thats not currently responding to client requests for a clustered application but is in standby in case the active node fails also called passive server

Pass-through disk: a physical disk attached to the host system thats placed oofline so that it an be usd by a VM instead of or in addtion to a virtual disk

Performance Monitor

Preboot Execution Environment a network environment built into many NICs that allows acmoputer to boot from an image stroed on a network server

Private virtual switch

Protected network

Quorum : a database containing cluster configuration information about the status of each node for clusered applications. Should the serverr remain online and which servers should participate in the cluster

ReFS

Remote server management

Resource Monitor

Security update

Service packs : a collection of bug fixxes, security, updates, and new features that can be installed on an OS to bring it up to date.

Shrink disk:

standalone server : a windows server that isnt a domain controller or a member of a domain

Storage Area Network a storage tech that uses high-speed networking tech to give servers fast access to large amounts of shared disk storage

Task Manager : a monitoring tool to view runnining process and the resoures they are consuming, you can see whats hapening with processes running on the system in real time so that you can take action in a timely manner if needed.

Virtual IP address : the IP address by which networking services provided by an NLB cluster are accessed by network clients. A DNS host record should exist for the cluster name mapped to this address.

Virtual LANs

Virtual NICs

Virtual Switch Manager

Virtual switches

VM - Checkpoint

VM - Guest services

Windows Server container an application environment that shares the host OS and kernel with the host OS and othe windows server conainers but as its own copy an duser mode data structures such as the registry file system and network configuration

Witness disk : shared storage used to store cluter configuration data and help determine the cluster quorum

WSUS server: Windows Server Update Services (WSUS), previously known as Software Update Services (SUS), is a computer program developed by Microsoft Corporation that enables administrators to manage the distribution of updates and hotfixes released for Microsoft products to computers in a corporate environment.