

MCITP Interview Questions

What is Active Directory Domain Services 2008?

Active Directory Domain Services (AD DS), formerly known as Active Directory Services, is the central location for configuration information, authentication requests, and information about all of the objects that are stored within your forest. Using Active Directory, you can efficiently manage users, computers, groups, printers, applications, and other directory-enabled objects from one secure, centralized location.

Domain Functional Level

Domain functionality activates features that affect the whole domain and that domain only. The four domain functional levels, their corresponding features, and supported domain controllers are as follows:

Domain Functional Level	Supported Domain Controllers	Activated Features
Windows 2000 mixed (Default)	Windows 2000 mixed, Windows NT 4.0, Windows Server 2003	Local and global groups, global catalog support
Windows 2000 native	Windows 2000 native, Windows Server 2003	Local and global groups, global catalog support, Kerberos authentication
Windows Server 2003	Windows Server 2003	Local and global groups, global catalog support, Kerberos authentication, DFS
Windows Server 2008	Windows Server 2008	Local and global groups, global catalog support, Kerberos authentication, DFS, Group Policy

What is DNS:-

Domain Name Service/Domain Name System

Provides resolution of name to IP addressing and resolution of IP addresses to names

What is DHCP:-

It gives Addresses automatically to the client who is requesting for an IP address

Centralized IP Address management

DHCP prevent IP address conflict and help conserve the use of client IP Address on the network

DHCP reduces the complexity and amount of administrator work by assigning TCP/IP configuration automatically to the clients.

What is the Global Catalog?

A global catalog server is a domain controller. It is a master searchable database that contains information about every object in every domain in a forest. The global catalog contains a complete replica of all objects in Active Directory for its host domain, and contains a partial replica of all objects in Active Directory for every other domain in the forest. It has two important functions: Provides group membership information during logon and authentication Helps users locate resources in Active Directory

Read-Only Domain Controllers (RODCs):-

RODC address some of the problems that are commonly found in branch offices. These locations might not have a DC, Or they might have a writable DC but no physical security to that DC, low network bandwidth, or inadequate expertise to support that DC.

Functionality of RODCs:-

Read-Only DS database

Uni-directional replication

Credential caching

Administrator role separation

Read-only AD DS Database:-

Except for accounts password, an RODC holds all the Active Directory objects and attributes that a writable domain controller holds.

However, changes cannot be made to the database that is stored on the RODC. Changes must be made on a writable domain controller and then replicated back to the RODC.

What are FMSO Roles? List them.

FSMO roles are server roles in a Forest

There are five types of FSMO roles

1-Schema master

2-Domain naming master

3-Rid master

4-PDC Emulator

5-Infrastructure master

The schema master

domain controller controls all updates and modifications to the schema. Once the Schema update is complete, it is replicated from the schema master to all other DCs in the directory. To update the schema of a forest, you must have access to the schema master. There can be only one schema master in the whole forest.

The domain naming master

domain controller controls the addition or removal of domains in the forest. This DC is the only one that can add or remove a domain from the directory. It can also add or remove cross references to domains in external directories. There can be only one domain naming master in the whole forest.

Infrastructure Master:

When an object in one domain is referenced by another object in another domain, it represents the reference by the GUID, the SID (for references to security principals), and the DN of the object being referenced. The infrastructure FSMO role holder is the DC responsible for updating an object's SID and distinguished name in a cross-domain object reference. At any one time, there can be only one domain controller acting as the infrastructure master in each domain.

The RID master

is responsible for processing RID pool requests from all domain controllers in a particular domain. When a DC creates a security principal object such as a user or group, it attaches a unique Security ID (SID) to the object. This SID consists of a domain SID (the same for all SIDs created in a domain), and a relative ID (RID) that is unique for each security principal SID created in a domain. Each DC in a domain is allocated a pool of RIDs that it is allowed to assign to the security principals it creates. When a DC's allocated RID pool falls below a threshold, that DC issues a request for additional RIDs to the domain's RID master. The domain RID master responds to the request by retrieving RIDs from the domain's unallocated RID pool and assigns them to the pool of the requesting DC. At any one time, there can be only one domain controller acting as the RID master in the domain. PDC Emulator

The PDC emulator

is necessary to synchronize time in an enterprise. Windows 2000/2003 includes the W32Time (Windows Time) time service that is required by the Kerberos Authentication protocol. All Windows 2000/2003-based computers within an enterprise use a common time. The purpose of the time service is to ensure that the Windows Time Service uses a hierarchical relationship that controls authority and does not permit loops to ensure appropriate common time usage.

Basic Disk Storage

Basic storage uses normal partition tables supported by MS-DOS, Microsoft Windows 95, Microsoft Windows 98, Microsoft Windows Millennium Edition (Me), Microsoft Windows NT, Microsoft Windows 2000, Windows Server 2003 and Windows XP. A disk initialized for Basic storage is called a basic disk. A basic disk contains basic volumes, such as primary partitions, extended partitions, and logical drives. Additionally, basic volumes include multidisk volumes that are created by using Windows NT 4.0 or earlier, such as volume sets, stripe sets, mirror sets, and stripe sets with parity. Windows XP does not support these multidisk basic volumes. Any volume sets, stripe sets, mirror sets, or stripe sets with parity must be backed up and deleted or converted to dynamic disks before you install Windows XP Professional.

Dynamic Disk Storage

Dynamic storage is supported in Windows XP Professional, Windows 2000 and Windows Server 2003. A disk initialized for dynamic storage is called a dynamic

disk. A dynamic disk contains dynamic volumes, such as simple volumes, spanned volumes, striped volumes, mirrored volumes, and RAID-5 volumes. With dynamic storage, you can perform disk and volume management without the need to restart Windows.

Dynamic Storage Terms

A volume is a storage unit made from free space on one or more disks. It can be formatted with a file system and assigned a drive letter. Volumes on dynamic disks can have any of the following layouts: simple, spanned, mirrored, striped, or RAID-5.

A simple volume

uses free space from a single disk. It can be a single region on a disk or consist of multiple, concatenated regions. A simple volume can be extended within the same disk or onto additional disks. If a simple volume is extended across multiple disks, it becomes a spanned volume.

A spanned volume

is created from free disk space that is linked together from multiple disks. You can extend a spanned volume onto a maximum of 32 disks. A spanned volume cannot be mirrored and is not fault-tolerant.

A striped volume (RAID-0)

is a volume whose data is interleaved across two or more physical disks. The data on this type of volume is allocated alternately and evenly to each of the physical disks. A striped volume cannot be mirrored or extended and is not fault-tolerant.

A mirrored volume (RAID-1)

is a fault-tolerant volume whose data is duplicated on two physical disks. All of the data on one volume is copied to another disk to provide data redundancy. If one of the disks fails, the data can still be accessed from the remaining disk. A mirrored volume cannot be extended.

A Striping With Parity (RAID-5)

volume is a fault-tolerant volume whose data is striped across an array of three or more disks. Parity (a calculated value that can be used to reconstruct data after a failure) is also striped across the disk array. If a physical disk fails, the portion of the RAID-5 volume that was on that failed disk can be re-created from the remaining data and the parity. A RAID-5 volume cannot be mirrored or extended.

The system volume

contains the hardware-specific files that are needed to load Windows (for example, Ntldr, Boot.ini, and Ntdetect.com). The system volume can be, but does not have to be, the same as the boot volume.

The boot volume

contains the Windows operating system files that are located in the %Systemroot% and %Systemroot%\System32 folders. The boot volume can be, but does not have to be, the same as the system volume.

RAID 0 Striping

RAID 1- Mirroring (minimum 2 HDD required)

RAID 5 Striping With Parity (Minimum 3 HDD required)

RAID levels 1 and 5 only gives redundancy

What is the SYSVOL folder?

The Sysvol folder on a Windows domain controller is used to replicate file-based data among domain controllers. Because junctions are used within the Sysvol folder structure, Windows NT file system (NTFS) version 5.0 is required on domain controllers throughout a Windows distributed file system (DFS) forest. This is a quote from Microsoft themselves basically the domain controller info stored in files like your group policy stuff is replicated through this folder structure.

What's New in Windows Server 2008 Active Directory Domain Services?

Active Directory Domain Services in Windows Server 2008 provides a number of enhancements over previous versions, including these

:Auditing - AD DS auditing has been enhanced significantly in Windows Server 2008. The enhancements provide more granular auditing capabilities through four new auditing categories: Directory Services Access, Directory Services Changes, Directory Services Replication, and Detailed Directory Services Replication. Additionally, auditing now provides the capability to log old and new values of an attribute when a successful change is made to that attribute

Fine-Grained Password Policies - AD DS in Windows Server 2008 now provides the

capability to create different password and account lockout policies for different sets of users in a domain. User and group password and account lockout policies are defined and applied via a Password Setting Object (PSO). A PSO has attributes for all the settings that can be defined in the Default Domain Policy, except Kerberos settings. PSOs can be applied to both users and groups.

Read-Only Domain Controllers — AD DS in Windows Server 2008 introduces a new type of domain controller called a read-only domain controller (RODC). RODCs contain a read-only copy of the AD DS database. RODCs

are covered in more detail in Chapter 6, “Manage Sites and Replication.”

Restartable Active Directory Domain Services — AD DS in Windows Server 2008 can now be stopped and restarted through MMC snap-ins and the command line. The restartable AD DS service reduces the time required to perform certain maintenance and restore operations. Additionally, other services running on the server remain available to satisfy client requests while AD DS is stopped.

AD DS Database Mounting Tool — AD DS in Windows Server 2008 comes with a AD DS database mounting tool, which provides a means to compare data as it exists in snapshots or backup taken at different times. The AD DS database mounting eliminates the need to restore multiple backups to compare the AD data that they contain and provides the capability to examine any change made to data stored in AD DS.

What is READMIN?

Readmin.exe: Replication Diagnostics Tool This command-line tool assists administrators in diagnosing replication problems between Windows domain controllers. Administrators can use Readmin to view the replication topology (sometimes referred to as RepsFrom and RepsTool) as seen from the perspective of each domain controller. In addition, Readmin can be used to manually create the replication topology (although in normal practice this should not be necessary), to force replication events between domain controllers, and to view both the replication metadata and up-to-dateness vectors.

What is NETDOM?

NETDOM is a command-line tool that allows management of Windows domains and trust relationships. It is used for batch management of trusts, joining computers to

domains, verifying trusts, and secure channels

KCC

The KCC is a built-in process that runs on all domain controllers and generates replication topology for the Active Directory forest. The KCC creates separate replication topologies depending on whether replication is occurring within a site (intrasite) or between sites (intersite). The KCC also dynamically adjusts the topology to accommodate new domain controllers, domain controllers moved to and from sites, changing costs and schedules, and domain controllers that are temporarily unavailable.

How do you view replication properties for AD?

By using Active Directory Replication Monitor. Start

> Run > Replmon

What are sites What are they used for?

One or more well-connected (highly reliable and fast) TCP/IP subnets. A site allows administrators to configure Active Directory access and replication topology to take advantage of the physical network.