GLOSSARY

A

Administrative Delegation

The granting of administrative capabilities to users or groups that are not members of the Domain Admins, Account Operators, or Enterprise Admins groups.

AGDLP

The Microsoft recommended model for permission management with users and groups. AGDLP stands for Accounts (A), Global groups (G), Domain local groups (DL), and permissions (P).

Application Server

A special server dedicated to application logic processing. Examples include mail servers, database servers, and collaboration servers.

B

BIOS

The basic input/output system (BIOS) is the internal software of a computer or server that initiates the system and monitors the health of the hardware.

Business Continuity

The collection of planning, administration, and disaster recovery tasks that allow your networks and systems to remain in operation or be recovered quickly in the event of a failure.

C

Client

A computing device or application that consumes services from servers and the network.

Cluster

A group of computers working as one to improve performance or availability for networked applications.

Collaboration Server

A server that provides collaboration services such as instant messaging, calendar sharing, document sharing, and workflow processes.

D

Database Server

A server that provides access to databases and may store business logic for data processing.

Dependencies

A service or services that another service depends on or the services on which a service depends.

Device Driver

A software module that communicates with a hardware device and the operating system.

DFS Namespace

A collection of shared folders, which may be distributed among multiple servers or grouped together into a single, virtual shared folder on the server.

DFS Replication

The role service responsible for synchronization of file and folder data across multiple Windows servers. The replacement for the File Replication Service (FRS) from earlier versions of Windows.

Distributed File System (DFS)

A two-part solution allowing simpler access to distributed data and replication of data in Windows Server environments.

Distribution Group

A type of group that may not be assigned permissions and that is often used for email distribution lists.

DNS Zone

A portion of the DNS namespace for which a DNS server has name-resolution authority.

Domain

A collection of computers (clients and servers) participating in a same named network based on the Active Directory Domain Services (AD DS) server role using a shared network directory database.

Domain Controller (DC)

A Windows server that maintains a copy of the Active Directory database (NTDS.DIT) and provides authentication for client computers and users logging on to the domain.

Domain Naming Master

The Active Directory DC used to add or remove domains to or from the network and to validate uniqueness of the domain name.

Domain Tree

A hierarchical group of domains sharing the same root namespace.

E

Encryption

The process of converting data from its normal state to an enciphered state.

Encryption

The process used to convert plaintext or readable text into cipher text. Encryption may be used on any data because all data is represented by binary numbers within computer systems. The input to the encryption algorithm is one set of binary numbers, and the output is another. The algorithm can both scramble and descramble the data.

Event Viewer

An application used to view, search, filter, and manage event logs in Windows operating systems.

F

Feature

A software program that supports or augments the functionality of one or more roles, or improves the functionality of the server.

File Allocation Table (FAT)

The Windows file system that provides backward compatibility with older versions of Windows and DOS, but does not provide advanced security or large drive support.

File Transfer Protocol (FTP)

A protocol used to transfer text or binary files between two machines.

Forest

A collection of domains sharing the same forest root domain. The domains may be in the same namespace or in separate namespaces.

Forest Root Domain

The first domain created in a forest and the container for the Enterprise Admins and Schema Admins groups.

Forest Trust

A trust relationship between forests. A forest trust may be a one-way or two-way transitive trust. A two-way trust is required for both forests to fully trust the other forest's domains.

Form Factor

The design of the server's physical case and mounting methods.

FTP Client

An application used to transfer files to and from FTP servers.

FTP Server

A machine configured to listen on the network for incoming FTP connections and to provide file server functions for sending and receiving files.

G

Group

A collection of groups or user accounts that may be managed as a unit and assigned permissions and rights.

Group Policy

The infrastructure that allows for the creation and application of a collection of settings that are used to control or configure Windows computers.

Group Policy Object (GPO)

A collection of settings that can be applied to Windows computers by linking it to a container.

Group Policy Preferences

A simple method for configuring settings through GPOs with dialog boxes similar to those in the local Windows GUI interface. Unlike policies, preferences may be changed by users to override the preference settings.

Group Policy Processing

The way in which Group Policy settings are downloaded and applied to Windows computers.

H

Hypervisor

The virtualization layer that sits between the hardware and the operating system in a bare metal virtual machine solution.

I

Information Technology Infrastructure Library (ITIL)

A set of documents that define best practices for technology management.

Infrastructure Master

The Active Directory DC that is responsible for the synchronization of group membership changes from on DC to another.

Interactive Installation

A Windows operating system installation that is completely managed by the user during the installation.

Internet Printing

A role service of the Print and Document Services server role that allows web-based printing and printer management.

IPSec (IP Security)

Internet Protocol Security (IPSec) is a Layer 3 data integrity and security protocol used in VPN devices. Data can be encrypted and packets and users authenticated using IPSec technology.

K

Kernel Mode

One of two operational modes in Windows operating systems. This is the mode in which the operating system itself and device drivers run.

L

Layer 2 Tunneling protocol (L2TP)

A VPN protocol that provides tunneling and relies on other protocols for encryption. L2TP is supported in Windows and many VPN server devices, and it is often used with IPSec for data encryption. L2TP is a well-suited VPN protocol for remote access because of its authentication and encryption mechanisms.

Least Privilege

A security principle stating that users and systems should have no greater capabilities than is required to perform their intended duties.

M

Mail Server

A server that can send and receive email messages on the behalf of users and store messages in user mailboxes.

Microsoft Update

The enhanced Microsoft updating solution that also supports updating Microsoft Office and other applications.

Monitoring Server

A server that monitors others servers on the network.

Multiple Local Group Policy Objects (MLGPO)

The new local Group Policy feature in Windows Vista and Server 2008 and later that allows for local policy settings, administrator versus nonadministrator policy settings, and specific user settings.

N

Network attached storage (NAS)

NAS is a storage solution that uses the standard network communications of a server to access directories on the storage device.

Network file system (NFS)

A file system access method designed to allow data access across the network.

Nonvolatile storage

Storage that is not lost when power is removed, such as a hard drive.

NT File System (NTFS)

The Windows file system that supports very large drives, security features such as EFS, and advanced permissions.

O

Organizational Unit (OU)

A logical container within a domain for the storage and administration of AD objects.

P

PDC Emulator

The Active Directory DC that provides backward compatibility with NT 4.0 BDCs (only available in Windows Server 2003 R2 and earlier) and acts as the primary password change server.

Performance Counter Alert

An object used to monitor a performance counter and take an action if it exceeds or falls below a specified threshold.

Performance Monitor

A console with the System Monitor preloaded and that also supports the collection of performance statistic and other data in the form of Data Collector Sets.

Policy Setting

A single setting, within a GPO, that controls or configures a Windows computer.

POST

The Power On Self-Test, which is used to check the health of the hardware and accuracy of the BIOS configuration at initial system power on.

Preboot Execution Environment (PXE)

A standard, which must be supported by the NIC to function properly, that allows computers without operating systems to boot from the network using a PXE-compliant DHCP server and a PXE boot server.

Preference Item

A single preference configuration, within a GPO, that provides a default setting for a configuration item.

Print Job

A document waiting to be printed in the print queue.

Print Job Priority

A value from 1 to 99 indicating the priority of a print job. Print jobs with a higher priority value are printed before jobs with a lower value.

Print Queue

A buffer used to hold print jobs until they can be printed.

Protocol Listener

A service that receives incoming requests and sends responses to those requests within Internet Information Services. The default protocol listener is HTTP.sys and is used for standard website requests and responses.

Public Key Infrastructure (PKI)

An internal collection of servers used to provide certificates for authentication and encryption on the network.

R

RAID

A storage technology that utilizes multiple drives in an array to provide improved performance, fault tolerance, or both.

Remote Assistance

A method used to provide remote control or remote viewing through an invitation request and response process.

Remote Desktop Protocol

The protocol used to establish connections using Remote Desktop Services.

Remote Desktop Services (RDS)

The server role in Windows Server 2008 and R2 that provides for remote desktop control using the Remote Desktop Client software.

Replication

The process of synchronizing the AD database on different DCs when changes are made to the domain.

Resource Forest

An Active Directory forest used to store and share centralized resources needed by all or many users on the network.

RID Master

The Active Directory DC in charge of the available relative IDs (RIDs) used in the creation of a security principal, such as a user account, security group, or computer object.

S

Schema Master

The only Active Directory DC that can modify the schema.

Secure Socket Layer (SSL)

A protocol that provides encryption for HTTP communications between a web client and a web server. Typically identified with the HTTPS protocol designator in the URL of the website.

Security Group

A type of group that may be assigned permissions.

Server

A network connected device that provides services to the network and networked devices.

Server Cluster

A collection of servers that work together to provide services to the network.

Server Core

A streamlined installation of Windows Server that does not include the full GUI and offers a reduced footprint and attack surface.

Server Role

A collection of responsibilities provided to the network or networked devices that depend on one or more role services.

Service

An application or innate operating system function that runs on Windows and offers services to the local machine, the network, or both.

Service Account

Either a local user account or an AD DS user account created to provide permissions to a service. The service runs as the service account.

Simple Object Access Protocol (SOAP)

A specification, based on XML, which allows developers to build web services that can communicate with each other in a standard method.

Site

A location defined by IP subnets for intersite AD replication and potential use of unique site-based Group Policies.

Software Framework

A collection of pre-built code and other functions that can be used to quickly develop complex business applications.

Storage area network (SAN)

A specially designed and installed network used for storage access. Usually based on Fibre Channel or iSCSI.

System Monitor

An ActiveX control that gathers information about performance counters and displays values as numeric information and line graphs.

Systems Thinking

The process of analyzing all interdependent components that comprise a system.

T

Task Manager

An application used to manage running processes on Windows operating systems.

Threat Management Server

A server that controls access to the network, monitors for threats, and potentially updates client computers to prevent security breaches.

Troubleshooting

The process of discovering the unknown cause and solution for a known problem.

U

Unattended Installation

A Windows operating system installation that is automated using an `unattend.xml` file to answer the questions normally asked of the installing user.

User Account

Also called an account or a user, the object in AD that represents a specific user or application and contains the properties or attributes of the entity.

V

Virtual Machine

A computer system that actually exists in the memory of another physical computer and can run a separate operating system.

Virtual Private Network (VPN)

A secured and encrypted communications link between two computing devices that provides for secure communications across any network. VPNs are most commonly used across public networks.

Virtual Private Network (VPN)

A tunneled connection between two networks or between two devices. The connection usually uses encryption for secure communications.

Virtualization

A solution that allows you to run multiple operating system instances concurrently on a single physical machine.

Virtualization

A method used to run multiple operating systems concurrently on a single physical machine. Each operating system runs in a virtual machine.

Volatile storage

Storage that is lost when power is removed, such as system memory.

Web Server

A server that provides access to static or dynamic HTML pages and may also serve as a web application server.

W

Windows Backup

The backup software built-in on Windows servers.

Windows Deployment Services (WDS)

A Microsoft operating system deployment solution that allows images to be loaded onto computers across the network.

Windows Server Update Service (WSUS)

A server role in Windows Server 2008 and R2 that downloads updates from Microsoft's website and makes them available to internal systems on a network.

Windows Update

The basic Microsoft updating solution that supports operating system and device driver updates.