

## Glossary

**access control list (ACL)** The ACL is a list that contains user and group security identifiers (SIDs), with the associated privileges of each user and group. Each object, such as a file or folder, has an access control list associated with it. *See also* security identifier (SID).

**account policy** The account policy is the set of rules indicating how passwords and account lockout are managed in Windows NT. Account policy is managed by using the Account Policy dialog box in User Manager or User Manager for Domains.

**active partition** The active partition is a primary partition on the first hard disk in a computer that has been marked active by a partitioning program, such as `Fdisk` or Disk Manager. A computer loads its operating system from the active partition.

**answer files (Unattend.txt)** Answer files are text files that contain stylized responses to the queries posed by the Windows NT setup program during installation. You can use an answer file, in conjunction with a network installation startup disk, to fully automate the installation of Windows NT on a single computer (in other words, perform an unattended installation). The default name for an answer file is `Unattend.txt`, but you can use any file name you want for your answer files.

**AppleTalk** AppleTalk is a routable network protocol developed by Apple Computer, Inc. This protocol is associated with Macintosh computers.

**application programming interface (API)** An API is a set of operating system functions that can be called by an application running on the computer. Windows NT supports the Win32, Win16, POSIX, MS-DOS, and OS/2 1.x APIs.

**archive bit** The archive bit is a file attribute that indicates that the file or folder has been modified since the last backup. The archive bit is applied by the operating system when a file or folder is saved or created, and is commonly removed by backup programs after the file or folder has been backed up. This file attribute is not normally changed by the administrator.

**auditing** Auditing is a Windows NT feature that enables you to collect and view security-related information concerning the success and failure of specified events, such as: file access, printer access, logon and logoff, and security policy changes. File auditing is only available on NTFS partitions. File and printer auditing require that auditing of File and Object Access be selected in the Audit Policy dialog box.

**authentication** Authentication is the verification of a user account name and password by Windows NT. Authentication can be performed by the local Windows NT computer or by a Windows NT Server domain controller.

**Backup** *See* Windows NT Backup.

**backup browser** A backup browser is a computer that maintains a backup copy of the browse list. The backup browser receives the browse list from the master browser, and then makes the browse list available to any computer that requests it. All computers on the network, when they request a copy of the browse list, do so from a backup browser. A backup browser updates its browse list by requesting an update from the master browser every twelve minutes. There can be more than one backup browser on each subnet. Any Windows NT Server, Windows NT Workstation, Windows 95, or Windows for Workgroups computer can perform the role of the backup browser. *See also* Computer Browser service and master browser.

**backup domain controller (BDC)** A BDC is a Windows NT Server computer that is configured to maintain a backup copy of the domain Directory Services database (SAM). The BDC receives updates to the Directory Services database from the primary domain controller (PDC) via a process called synchronization. *See also* primary domain controller and synchronization.

**binary tree** A binary tree is the type of search used by the NTFS file system to quickly locate files and folders on an NTFS partition. A binary tree search is much faster than a sequential read or search. *See also* sequential read.

**bindings** Bindings are associations between a network service and a protocol, or between a protocol and a network adapter.

**BIOS** BIOS stands for *Basic Input/Output System*. The BIOS is a program which is stored in ROM (read-only memory) on a computer's motherboard. The BIOS contains instructions for performing the Power On Self Test (POST).

**blue screen** A blue screen is displayed by Windows NT when it encounters a STOP error that it cannot recover from. A blue screen contains information about the type of error that occurred, a list of loaded drivers, and a processor stack dump.

**boot loader** Boot loader is a program that is used to load a computer's operating system. In Windows NT, the boot loader is a program called `ntldr`, and it creates a menu (the boot loader menu) by parsing the contents of the `Boot.ini` file. Once the user selects an operating system from this menu (or the default time period expires), `ntldr` begins the process of starting the selected (or default) operating system.

**boot partition** The boot partition is the partition that contains the Windows NT system files. The boot partition contains the folder that Windows NT is installed in.

**boot sequence** The Windows NT boot sequence consists of a series of steps, beginning with powering on the computer and ending with completion of the logon process. The boot sequence steps vary according to the hardware platform you are using.

**bottleneck** A bottleneck is the component in the system that is slowing system performance. In a networking environment, the bottleneck is the part of the system that is performing at peak capacity while other components in the system are not working at peak capacity. In other words, if it weren't for the limiting component, the rest of the system could go faster.

**browsing** Browsing is the process of viewing a list of computers and their available shared resources, or viewing a list of files and folders on a local or network-connected drive.

**built-in groups** Built-in groups are the default groups created by the operating system during a Windows NT installation. Different groups are created on Windows NT domain controllers than are created on non-domain controllers.

**C2 secure environment** C2 is a designation in a range of security levels identified in the computer security specifications developed by the National Computer Security Center. If installed and configured correctly, Windows NT meets the C2 level of security.

**cache** Cache is a section of memory used to temporarily store files from the hard disk.

**capacity planning** Capacity planning is the process of determining current usage of server and/or network resources, as well as tracking utilization over time, in order to predict future usage and the additional hardware that will be required to meet the projected levels of utilization.

**CDFS** CDFS stands for *Compact Disc Filing System*. CDFS supports access to compact discs, and is only used on CD-ROM devices.

**client** A client is a computer that is capable of accessing resources on other computers (servers) across a network. Some computers are configured with both client and server software. *See also* server.

**Client Service for NetWare (CSNW)** CSNW is a Windows NT Workstation service that enables a Windows NT Workstation computer to access files and print queues on NetWare 3. *x* and 4. *x* servers.

**complete trust domain model** This is a decentralized domain model that consists of two or more domains that contain both user accounts and shared resources. In the complete trust domain model, a two-way trust relationship must be established between each and every domain. Because of the excessive number of trusts required for this model, the complete trust domain model is not often implemented. *See also* trust relationship and two-way trust.

**Computer Browser service** This Windows NT service is responsible for the process of building a list of available network servers, called a browse list. The Computer Browser service is also responsible for determining the role a computer will play in the browser hierarchy: domain master browser, master browser, backup browser, or potential browser. *See also* backup browser, domain master browser, master browser, and potential browser.

**computer name** A computer name is a unique name, up to fifteen characters in length, that is used to identify a particular computer on the network. No two computers on the same internetwork should have the same computer name.

**computer policy** A computer policy is a collection of Registry settings created in System Policy Editor that specify a local computer's configuration. A computer policy enforces the specified configuration on all users of a particular Windows NT (or Windows 95) computer.

**Control Panel** Control Panel is a group of mini applications that are used to configure a Windows NT computer.

**Default Computer policy** The Default Computer policy is a computer policy that applies to all computers that don't have an individual computer policy. *See also* computer policy.

**default gateway** A default gateway is a TCP/IP configuration setting that specifies the IP address of the router on the local network segment.

**Default User policy** The Default User policy is a user policy that applies to all users that don't have an individual user policy. *See also* user policy.

**Default User profile** The Default User profile is a user profile folder created during the Windows NT installation process. The settings in the Default User profile are applied, by default, to new user profiles as they are created. The Default User profile can be modified by using the Registry Editors or by using Windows NT Explorer. *See also* user profile.

**demand paging** Demand paging is a process used by the Windows NT Virtual Memory Manager that involves reading pages of memory from the paging file into RAM, and writing pages of memory from RAM into the paging file as required by the operating system. *See also* paging file.

**desktop** The desktop is the screen that is displayed after Windows NT 4.0 boots and you log on. The desktop replaces the Program Manager interface from earlier versions of Windows and Windows NT.

**desktop operating system** A desktop operating system is an operating system that is designed to be used by an individual user on his or her desktop. A desktop operating system is not designed to be used on a network server.

**DHCP** DHCP stands for *Dynamic Host Configuration Protocol*. This protocol is used to dynamically assign IP addresses to client computers on a network.

**DHCP Relay Agent** The DHCP Relay Agent is a Windows NT Server service that forwards client computers' DHCP requests to a DHCP server on another subnet. *See also* DHCP.

**Dial-Up Networking** Dial-Up Networking is a Windows NT service that enables a computer to use its modem to make a network connection over a telephone line to another computer. Dial-Up Networking is installed during the installation of the Remote Access Service (RAS) on a Windows NT computer. *See also* Remote Access Service (RAS).

**directory** A directory is a folder. In Windows NT terminology, the terms *directory* and *folder* are synonymous. The two terms are used interchangeably throughout Windows NT documentation and the Windows NT user interface.

**directory replication** Directory replication was designed to copy logon scripts from a central location, usually the PDC, to all domain controllers, thus enabling all users to execute their own logon scripts no matter which domain controller validates their logon. Replication involves copying subfolders and their files from the source folder on the source server to the destination folder on all Windows NT computers on the network that are configured as replication destinations.

**Directory Replicator service** The Directory Replicator service is a Windows NT service that copies (replicates) files from a source Windows NT computer to a destination Windows NT computer. *See also* directory replication.

**Directory Services** *See* Windows NT Directory Services.

**Directory Services database** *See* Security Accounts Manager (SAM) database.

**disk duplexing** Disk duplexing is a fault tolerance method that involves duplication of a partition from one hard disk onto a second hard disk. In disk duplexing, each hard disk must be on a different hard disk controller.

**disk mirroring** Disk mirroring is a fault tolerance method that involves duplication of a partition from one hard disk onto a second hard disk. In disk mirroring, each hard disk can be on the same or a different hard disk controller.

**DNS** *See* Microsoft DNS.

**domain** A domain is a logical grouping of networked computers in which one or more of the computers has shared resources, such as a shared folder or a shared printer, and in which all of the computers share a common central domain Directory Services database that contains user account and security information.

**domain controller** A domain controller is a Windows NT Server computer that maintains a copy of the domain Directory Services database (also called the SAM). *See also* backup domain controller, primary domain controller, and Security Accounts Manager database (SAM).

**domain master browser** The domain master browser is a computer that maintains a list of available network servers located on all subnets in the domain. Additionally, the domain master browser maintains a list of available workgroups and domains on the internetwork. The domain master browser is the primary domain controller. *See also* Computer Browser service.

**domain name** A domain name is a unique name, up to fifteen characters in length, assigned to identify the domain on the network. A domain name must be different than all other domain names, workgroup names, and computer names on the network.

**Dr. Watson for Windows NT** Dr. Watson is a Windows NT tool that is used to debug application errors.

**dual boot** Dual boot refers to the capability of a computer to permit a user to select from more than one operating system during the boot process. (Only one operating system can be selected and run at a time.)

**dynamic routing** In dynamic routing, a router automatically builds and updates its routing table. In a dynamic routing environment, administrators don't have to manually configure the routing table on each individual router. As changes are made to the network, dynamic routers automatically adjust their routing tables to reflect these changes. Periodically, each dynamic router on the network broadcasts packets containing the contents of its routing table. Dynamic routers that receive these packets add the routing table information received to their own routing tables. In this way, dynamic routers are able to recognize other routers as they are added to and removed from the network.

**Emergency Repair Disk** The Emergency Repair Disk is a floppy disk created during (or after) the Windows NT installation process that is used to repair Windows NT when its configuration files have been damaged or corrupted.

**enhanced metafile (EMF)** An enhanced metafile is an intermediate print job format that can be created very quickly by the graphic device driver interface. Using an EMF enables Windows NT to process the print job in the background while the foreground process continues.

**Event Log service** The Event Log service is a Windows NT service that writes operating system, application, and security events to log files. These log files can be viewed by an administrator using Event Viewer. *See also* Event Viewer.

**Event Viewer** Event Viewer is a Windows NT administrative tool that enables an administrator to view and/or archive the operating system, application, and security event logs.

**exabyte** An exabyte is a billion gigabytes (1,152,921,504,606,846,976 bytes).

**Executive Services (Windows NT Executive)** Executive Services is the entire set of services that make up the kernel mode of the Windows NT operating system.

**extended partition** An extended partition is a disk partition that can be subdivided into one or more logical drives. An extended partition can't be the active partition. *See also* active partition.

**fault tolerance** Fault tolerance refers to the ability of a computer or operating system to continue operations when a severe error or failure occurs, such as the loss of a hard disk or a power outage.

**file allocation table (FAT) file system** FAT is a type of file system that is used by several operating systems, including Windows NT. Windows NT does not support security or auditing on FAT partitions. The maximum size of a FAT partition is 2GB.

**file attributes** File attributes are markers assigned to files that describe properties of the file and limit access to the file. File attributes include: Archive, Compress, Hidden, Read-only, and System.

**file system** A file system is an overall architecture for naming, storing, and retrieving files on a disk.

**folder** A folder is a directory. In Windows NT terminology, the terms *directory* and *folder* are synonymous. The two terms are used interchangeably throughout Windows NT documentation and the Windows NT user interface.

**frame type** A frame type (also called a *frame format*) is an accepted, standardized structure for transmitting data packets over a network.

**fully qualified domain name (FQDN)** An FQDN is a fancy term for the way computers are named and referenced on the Internet. The format for an FQDN is: *server\_name.domain\_name.root\_domain\_name*. For example, a server named `wolf` in the `alancarter` domain in the `com` root domain has a Fully Qualified Domain Name of `wolf.alancarter.com`. Fully qualified domain names always use lowercase characters.

**gateway** A gateway is a computer that performs protocol or data format translation between two computers that use different protocols or data formats.

**Gateway Service for NetWare (GSNW)** Gateway Service for NetWare (GSNW) is a Windows NT Server service that, when installed and configured on a Windows NT Server computer, provides all of the functionality of Client Service for NetWare (CSNW). Additionally, GSNW enables the Windows NT Server computer to transparently share resources (files, folders, and printers) located on a NetWare server to client computers of the Windows NT Server computer. GSNW accomplishes this by converting the Server Message Blocks (SMBs) from the client computers of the Windows NT Server computer into NetWare Core Protocol (NCP) requests that are recognized by the NetWare server. *See also* Client Service for NetWare.

**gigabyte (GB)** A gigabyte is 1,024 megabytes (MB), or 1,073,741,824 bytes.

**global group** A global group is a Windows NT Server group that can only be created in the domain Directory Services database. Global groups are primarily used to organize users that perform similar tasks or have similar network access requirements. In a typical Windows NT configuration, user accounts are placed in a global group, then the global group is made a member of one or more local groups, and each local group is assigned permissions to a network resource. The advantage of using global groups is ease of administration — the network administrator can manage large numbers of users by placing them in global groups. Global groups are only available in Windows NT Server domains — they are not available in workgroups or on a stand-alone server. *See also* local group.

**Graphics Device Interface (GDI)** The GDI is a specific Windows NT device driver that manages low-level display and print data. The GDI used to be part of user mode in Windows NT 3.51, but is now part of the kernel mode (Executive Services) in Windows NT 4.0.

**group dependencies** Group dependencies are groups of services or drivers that must be running before a given service (or driver) can start.

**group policy** A group policy is a policy that applies to a group of users. Group policies apply to all users that are members of a group (that has a group policy), and that do not have individual user policies.

**Hardware Compatibility List (HCL)** The HCL is a list of hardware that is supported by Windows NT. The HCL is shipped with Windows NT. You can access the latest version of the HCL at [www.microsoft.com/networkstation](http://www.microsoft.com/networkstation) or [www.microsoft.com/ntserver](http://www.microsoft.com/ntserver).

**hertz (Hz)** Hz is a unit of frequency measurement equivalent to one cycle per second.

**hive** A hive is a group of Windows NT Registry keys and values that are stored in a single file. *See also* key, Registry, and value.

**host** A host is a computer that is connected to a TCP/IP network, such as the Internet.

**HPFS** HPFS stands for *high performance file system*. This is the file system used by OS/2. Windows NT used to support HPFS, but HPFS support was dropped for NT version 4.0.

**Internet Information Server (IIS)** Internet Information Server is a Microsoft Windows NT Server service that provides World Wide Web (WWW), File Transfer Protocol (FTP), and Gopher publishing services.

**internetwork** An internetwork consists of multiple network segments connected by routers and/or WAN links.

**interrupt (IRQ)** An interrupt is a unique number between two and fifteen that is assigned to a hardware peripheral in a computer. No two devices in the computer should have the same interrupt, unless the devices are capable of (and correctly configured to) share an interrupt.

**intranetwork** An intranetwork is a TCP/IP internetwork that is not connected to the Internet. For example, a company's multi-city internetwork can be called an intranetwork as long as it is not connected to the Internet. *See also* internetwork.

**kernel** A kernel is the core component of an operating system.

**kernel mode** Kernel mode refers to a highly privileged mode of operation in Windows NT. "Highly privileged" means that all code that runs in kernel mode can access the hardware directly, and can access any memory address. A program that runs in kernel mode is always resident in memory—it can't be written to the paging file. *See also* user mode.

**key** A key is a component of the Registry that is similar to a folder in a file system. A key can contain other keys and value entries. *See also* Registry and value.

**kilobyte (KB)** A kilobyte is 1,024 bytes.

**line printer daemon (LPD)** LPD is the print server software used in TCP/IP printing. LPD is supported by many operating systems, including Windows NT and UNIX.

**local group** A local group is a Windows NT group that can be created in the domain Directory Services database on a domain controller or in the SAM on any non-domain controller. Local groups are primarily used to control access to resources. In a typical Windows NT configuration, a local group is assigned permissions to a specific resource, such as a shared folder or a shared printer. Individual user accounts and global groups are then made members of this local group. The result is that all members of the local group then have permissions to the resource. Using local groups simplifies the administration of network resources, because permissions can be assigned once, to a local group, instead of separately to each user account. *See also* global group.

**local print provider** A local print provider is a Windows NT kernel mode driver that manages printing for all print devices managed by the local computer.

**LocalTalk** LocalTalk is a specification for the type of network cabling, connectors, and adapters developed by Apple Computer, Inc. for use with Macintosh computers.

**logging on** Logging on is the process of supplying a user name and password, and having that user name and password authenticated by a Windows NT computer. A user is said to "log on" to a Windows NT computer.

**logical drive** A logical drive is a disk partition (or multiple partitions) that has been formatted with a file system and assigned a drive letter.

**logon hours** Logon hours are the assigned hours that a user can log on to a Windows NT Server domain controller. The logon hours configuration only affects the user's ability to access the domain controller — it does not affect a user's ability to log on to a Windows NT Workstation computer or to a non-domain controller.

**logon script** A logon script is a batch file that is run when a user logs on. All MS-DOS 5.0 (and earlier versions) batch commands can be used in logon scripts.

**mandatory user profile** A mandatory user profile is a user profile that, when assigned to a user, can't be modified by the user. A user can make changes to desktop and work environment settings during a single logon session, but these changes are not saved to the mandatory profile when the user logs off. Each time the user logs on, the user's desktop and work environment settings revert to those contained in the mandatory user profile. A mandatory user profile is created by renaming the user's `ntuser.dat` file to `ntuser.man`. *See also* user profile.

**master browser** A master browser is the computer on the subnet that builds and maintains the browse list for that subnet. The master browser distributes this browse list to backup browsers on the subnet and to the domain master browser. *See also* backup browser, Computer Browser service, and domain master browser.

**Maximum Password Age** The Maximum Password Age is the maximum number of days a user may use the same password.

**megabyte (MB)** A megabyte is 1,024 kilobytes, or 1,048,576 bytes.

**member server** A member server is a Windows NT Server computer that is not installed as a domain controller, and that has joined a Windows NT Server domain.

**memory dump** The term memory dump refers to the process of Windows NT copying the contents of RAM into a file (the `memory.dmp` file) when a STOP error or blue screen occurs.

**Microsoft DNS** Microsoft DNS is a Windows NT Server service. This service is a TCP/IP-based name resolution service. It is used to resolve a host name or an FQDN to its associated IP address.

**Migration Tool for NetWare** Migration Tool for NetWare is a Windows NT Server administrative tool that makes it possible for an administrator to migrate a NetWare server's user accounts and files to a Windows NT Server computer. Migration Tool for NetWare requires that Gateway Service for NetWare and NWLink IPX/SPX Compatible Transport be installed in the Windows NT Server computer. *See also* Gateway Service for NetWare and NWLink IPX/SPX Compatible Transport.

**million bits per second (Mbps)** Mbps is a measurement of data transmission speed that is used to describe WAN links and other network connections.

**Minimum Password Age** The Minimum Password Age is the minimum number of days a user must keep the same password.

**Minimum Password Length** Minimum Password Length specifies the minimum number of characters required in a user's password.

**MS-DOS** MS-DOS is a computer operating system developed by Microsoft. MS-DOS stands for *Microsoft Disk Operating System*.

**multihomed** A computer is said to be multihomed when it has more than one network adapter installed in it.

**multiple master domain model** This domain model consists of two or more master domains that contain user accounts, and any number of resource domains that contain shared resources. In this model, a two-way trust is used between each of the master domains, and a one-way trust is used from each resource domain to each and every master domain. *See also* trust relationship, one-way trust, and two-way trust.

**multiprocessing** Multiprocessing refers to the capability of an operating system to use more than one processor in a single computer simultaneously.

**NetBEUI** NetBEUI is a nonroutable protocol designed for use on small networks. NetBEUI is included in Windows NT 4.0 primarily for backward compatibility with older Microsoft networking products.

**network access order** The network access order specifies which protocol or service Windows NT will use first when it attempts to access another computer on the network.

**network adapter** A network adapter is an adapter card in a computer that enables the computer to connect to a network.

**Network Client Administrator** Network Client Administrator is a Windows NT Server tool you can use to create an installation disk set to install network clients or services on client computers. You can also use Network Client Administrator to create a network installation startup disk. A network installation startup disk, when run on a computer that needs to be set up (the target computer), causes the target computer to automatically connect to the server and to start an interactive installation/setup routine.

**network device driver** A network device driver is a Windows NT kernel mode driver that is designed to enable Windows NT to use a network adapter to communicate on the network.

**Network Monitor** Network Monitor is a Windows NT Server administrative tool that allows you to capture, view, and analyze network traffic (packets).

**network number** Network numbers are 32-bit binary numbers that uniquely identify an NWLink IPX/SPX Compatible Transport network segment for routing purposes. Because network numbers uniquely identify a network segment, they are used by IPX routers to correctly forward data packets from one network segment to another.

**non-browser** A non-browser is a computer that is not capable of maintaining a browse list either because it was configured not to do so, or because the operating system on this computer is incapable of maintaining a browse list. *See also* Computer Browser service.

**NT Hardware Qualifier (NTHQ)** The NT Hardware Qualifier (NTHQ) is a utility that ships with Windows NT. NTHQ examines and identifies a computer's hardware configuration, including the hardware settings used by each adapter.

**NTFS** *See* Windows NT file system.

**NTFS permissions** NTFS permissions are permissions assigned to individual files and folders on an NTFS partition that are used to control access to these files and folders. NTFS permissions apply to local users as well as to users who connect to a shared folder over-the-network. If the NTFS permissions are more restrictive than share permissions, the NTFS permissions will be applied. *See also* share permissions.

**NWLink IPX/SPX Compatible Transport** NWLink IPX/SPX Compatible Transport is a routable transport protocol typically used in a combined Windows NT and NetWare environment. NWLink IPX/SPX Compatible Transport is Microsoft's version of Novell's IPX/SPX protocol. (IPX/SPX is the protocol used on most Novell NetWare networks.) NWLink provides protocol compatibility between Windows NT and NetWare computers. In addition to its functionality in a NetWare environment, NWLink also fully supports Microsoft networking.

**ODBC** ODBC stands for *Open Database Connectivity*. ODBC is a software specification that enables ODBC-enabled applications (such as Microsoft Excel) to connect to databases (such as Microsoft SQL Server and Microsoft Access).

The ODBC application in Control Panel is used to install and remove ODBC drivers for various types of databases. Additionally, this application is used to configure ODBC data sources.

**\$OEM\$ subfolder** The \$OEM\$ subfolder is used to store source files that are used to install applications, components, or files that do not ship with Windows NT. This subfolder is used during an automated setup of Windows NT.

**one-way trust** When a single trust relationship exists between two domains, it is called a one-way trust. Both domains must be configured by an administrator in order to establish a trust relationship. Trusts are configured in Windows NT by using User Manager for Domains. The trusted domain should be configured first, and then the trusting domain. *See also* trust relationship, trusted domain, and trusting domain.

**packet** A packet is a group of bytes sent over the network as a block of data.

**paging file** A paging file (sometimes called a page file or a swap file) is a file used as a computer's virtual memory. Pages of memory that are not currently in use can be written to a paging file to make room for data currently needed by the processor. *See also* virtual memory.

**partition** A partition is a portion of a hard disk that can be formatted with a file system, or combined with other partitions to form a larger logical drive. *See also* logical drive.

**pass-through authentication** Pass-through authentication is a process in which one Windows NT computer passes a user name and password on to another

**Windows NT computer for validation.** Pass-through authentication makes it possible for a user to log on to a Windows NT Workstation computer by using a user account from a Windows NT Server domain.

**Password Uniqueness** Password Uniqueness specifies how many different passwords a user must use before a previous password can be reused.

**Peer Web Services** Peer Web Services is a Windows NT Workstation Internet publishing service that supports World Wide Web (WWW), File Transfer Protocol (FTP), and Gopher services. Peer Web Services is optimized to serve a small number of clients, such as might be found on a small company intranet.

**Performance Monitor** Performance Monitor is a Windows NT tool that is used to gather statistics on current performance of a Windows NT computer. Performance Monitor statistics can be displayed in a Chart, Alert, or Report view; or can be saved to a log file for later viewing.

**permissions** Permissions control access to resources, such as shares, files, folders, and printers on a Windows NT computer.

**Plug and Play** Plug and Play is a specification that makes it possible for hardware devices to be automatically recognized and configured by the operating system without user intervention.

**Point-to-Point Multilink Protocol** Point-to-Point Multilink Protocol is an extension of the Point-to-Point Protocol. Point-to-Point Multilink Protocol combines the bandwidth from multiple physical connections into a single logical connection. This means that multiple modem, ISDN, or X.25 connections can be bundled together to form a single logical connection with a much higher bandwidth than a single connection can support. *See also* Point-to-Point Protocol.

**Point-to-Point Protocol (PPP)** Point-to-Point Protocol (PPP) is a newer connection protocol that was designed to overcome the limitations of the Serial Line Internet Protocol (SLIP). PPP is currently the industry standard remote connection protocol, and is recommended for use by Microsoft. PPP connections support multiple transport protocols, including: TCP/IP, NWLink IPX/SPX Compatible Transport, and NetBEUI. Additionally, PPP supports dynamic server-based IP addressing (such as DHCP). PPP supports password encryption, and the PPP connection process does not usually require a script file. *See also* Serial Line Internet Protocol (SLIP).

**Point-to-Point Tunneling Protocol (PPTP)** Point-to-Point Tunneling Protocol (PPTP) permits a virtual private encrypted connection between two computers over an existing TCP/IP network connection. The existing TCP/IP network connection can be over a local area network or over a Dial-Up Networking TCP/IP connection (including the Internet). All standard transport protocols are supported within the Point-to-Point Tunneling Protocol connection, including NWLink IPX/SPX Compatible Transport, NetBEUI, and TCP/IP. A primary reason for choosing to use PPTP is that it supports the RAS encryption feature over standard, unencrypted TCP/IP networks, such as the Internet.

**POSIX** *Portable Operating System Interface for Computing Environments* (POSIX) was developed as a set of accepted standards for writing applications for use on various UNIX computers. POSIX environment applications consist of applications developed to meet the POSIX standards. These applications are sometimes referred to as POSIX-compliant applications. Windows NT provides support for POSIX-compliant applications via the POSIX subsystem. Windows NT supports the POSIX subsystem on all hardware platforms supported by Windows NT. To fully support POSIX-compliant applications, at least one NTFS partition is required on the Windows NT computer. POSIX applications are source compatible across all supported hardware platforms. This means that POSIX applications must be recompiled for each hardware platform in order to be run on that platform.

**potential browser** A potential browser is a computer that does not currently maintain or distribute a browse list, but is capable of doing so. A potential browser can become a backup browser at the direction of the master browser. *See also* backup browser, Computer Browser service, and master browser.

**preemptive multitasking** In preemptive multitasking, the operating system allocates processor time between applications. Because Windows NT, not the application, allocates processor time between multiple applications, one application can be preempted by the operating system, and another application enabled to run. When multiple applications are alternately paused and then allocated processor time, they appear to run simultaneously to the user.

**primary domain controller (PDC)** A PDC is a Windows NT Server computer that is configured to maintain the primary copy of the domain Directory Services database (also called the SAM). The PDC sends Directory Services database updates to backup domain controllers (BDCs) via a process called synchronization. *See also*

**backup domain controller**, Security Accounts Manager database (SAM), and synchronization.

**primary partition** A primary partition is a disk partition that can be configured as the active partition. A primary partition can only be formatted as a single logical drive. *See also* active partition.

**print device** In Windows NT, the term print device refers to the physical device that produces printed output—this is what most people refer to as a printer.

**print device driver** A print device driver is a Windows NT kernel mode driver that formats print jobs into a RAW format. (The RAW format is ready to print, and no further processing is required.) A print device driver can also convert EMF formatted print jobs into a RAW format. *See also* enhanced metafile (EMF).

**print job** A print job is all of the data and commands needed to print a document.

**print monitor** A print monitor is a software component that runs in kernel mode. A print monitor sends ready-to-print print jobs to a print device, either locally or across the network. Print monitors are also called port monitors.

**print processor** A print processor is a kernel mode driver that manages printer device drivers and the process of converting print jobs from one format into another.

**print queue** In Windows NT terminology, a print queue is a list of print jobs for a specific printer that are waiting to be sent to a print device. The print queue is maintained by the Windows NT Spooler service. *See also* Spooler service.

**print server** A print server is a software program on a computer that manages print jobs and print devices. The Windows NT Spooler service functions as a print server. The term print server is also used to refer to a computer used primarily to manage multiple print devices and their print jobs. *See also* Spooler service.

**printer** In Windows NT, the term printer does not represent a physical device that produces printed output. Rather, a printer is the software interface between the Windows NT operating system and the device that produces the printed output. In other operating systems, what Windows NT calls a printer is often referred to as a print queue.

**printer pool** When a printer has multiple ports (and multiple print devices) assigned to it, this is called a printer pool. Users print to a single printer, and the printer load-balances its print jobs between the print devices assigned to it.

**RAM** *Random access memory*, or RAM, is the physical memory installed in a computer.

**Rdisk.exe** `Rdisk.exe` is a Windows NT utility that is used to update the Emergency Repair Disk. Using `Rdisk /s` causes this utility to back up the SAM and Security hives in the Registry. (If the `/s` switch is not used, the SAM and Security hives in the Registry are not backed up.) *See also* Emergency Repair Disk.

**refresh** The term refresh means to update the display with current information.

**Registry** The Windows NT Registry is a database that contains all of the information required to correctly configure an individual Windows NT computer, its user accounts, and applications. Registries are unique to each computer — you shouldn't use the Registry from one computer on another computer. The Registry is organized in a tree structure consisting of five subtrees, and their keys and value entries. *See also* key and value.

**Registry editors** Registry editors are tools that enable you to search and modify the Windows NT Registry. There are two primary tools for editing the Windows NT Registry: the Windows NT Registry Editor (`regedt32.exe`), and the Windows 95 Registry Editor (`regedit.exe`). Additionally, you can use the Windows NT System Policy Editor (`poledit.exe`) to modify a limited number of settings in the Registry. However, you can't use System Policy Editor to search the Registry.

**Remote Access Admin** Remote Access Admin is a Windows NT administrative tool that is primarily used to start and stop the Remote Access Service (RAS), to assign the dialin permission to users, and to configure a call back security level for each user. Remote Access Admin can also be used to view COM port status and statistics, to disconnect users from individual ports, and to remotely manage RAS on other Windows NT computers.

**Remote Access Service (RAS)** Remote Access Service (RAS) is a Windows NT service that enables dial-up network connections between a RAS server and a Dial-Up Networking client computer. RAS includes software components for both the RAS server and the Dial-Up Networking client in a single Windows NT service. RAS enables users of remote computers to use the network as though they were

directly connected to it. Once the dial-up connection is established, there is no difference in network functionality, except that the speed of the link is often much slower than a direct connection to the LAN.

**RIP** *Routing Information Protocol* (RIP) is the software that enables routers to dynamically update their routing tables. Windows NT ships with two versions of RIP: RIP for Internet Protocol, and RIP for NWLink IPX/SPX Compatible Transport. *See also* dynamic routing, RIP for Internet Protocol, and RIP for NWLink IPX/SPX Compatible Transport.

**RIP for Internet Protocol** RIP for Internet Protocol is a Windows NT service that enables Windows NT to dynamically update its routing tables when it is configured as a TCP/IP router. *See also* dynamic routing and RIP.

**RIP for NWLink IPX/SPX Compatible Transport** RIP for NWLink IPX/SPX Compatible Transport is a Windows NT service that enables Windows NT to dynamically update its routing tables when it is configured as an IPX router. *See also* dynamic routing and RIP.

**roaming user profiles** Roaming user profiles are user profiles that are stored on a server. Because these profiles are stored on a server instead of a local computer, they are available to users regardless of which Windows NT computer on the network they log on to. The benefit of using roaming user profiles is that users retain their own customized desktop and work environment settings even though they may use several different Windows NT computers.

**router** A router is a network device that uses protocol-specific addressing information to forward packets from a source computer on one network segment across one or more routers to a destination computer on another network segment.

**routing** Routing is the process of forwarding packets from a source computer on one network segment across one or more routers to a destination computer on another network segment by using protocol-specific addressing information. Devices that perform routing are called routers.

**SAP Agent** The *Service Advertising Protocol* (SAP) Agent is a Windows NT service that advertises a Windows NT computer's services (such as SQL Server and SNA Server) to NetWare client computers. The SAP Agent requires the use of NWLink IPX/SPX Compatible Transport. The SAP Agent should be installed when NetWare client computers will access services on a Windows NT computer.

**scsi** SCSI stands for *Small Computer System Interface*. SCSI is a hardware specification for cables, adapter cards, and the devices that they manage, such as: hard disks, CD-ROMs, and scanners.

**Security Accounts Manager (SAM) database** The SAM is a Windows NT Registry hive that is used to store all user account, group account, and security policy information for a Windows NT computer or a Windows NT domain. On a domain controller, the SAM is also referred to as the domain Directory Services database.

**security identifier (SID)** A security identifier (SID) is a unique number assigned to a user account, group account, or computer account in the Security Accounts Manager (SAM) database. *See also* Security Accounts Manager (SAM) database.

**security log** The security log is a file that is managed by the Windows NT Event Log service. All auditing of security events is written to the security log. An Administrator can view the security log by using Event Viewer.

**segment** In network terminology, a segment refers to a network subnet that is not subdivided by a bridge or a router. The term segment can also be used as a verb, describing the process of dividing the network into multiple subnets by using a bridge or a router.

**sequential read** A sequential read is a read performed (normally by the operating system) from the beginning of a file straight through to the end of the file. No random access to different parts of the file can occur during a sequential read.

**server** A server is a computer on a network that is capable of sharing resources with other computers on the network. Many computers are configured as both clients and servers, meaning that they can both access resources located on other computers across-the-network, and they can share their resources with other computers on the network. *See also* client.

**Server Manager** Server Manager is a Windows NT Server administrative tool that allows remote management of shared folders, remote starting and stopping of services, remote management of Directory Replication, remote viewing to determine which users are currently accessing shared resources, and remote disconnection of users from shared resources on a Windows NT Server computer.

**Server service** The Server service is a Windows NT service that enables Windows NT computers to share their resources with other computers on the network.

**service dependencies** Service dependencies are services and drivers that must be running before a particular service (or driver) can start.

**Services for Macintosh** Services for Macintosh is a Windows NT Server service that enables Macintosh client computers to connect to Macintosh-accessible volumes on a Windows NT Server computer, enables Macintosh client computers to access shared printers on a Windows NT Server computer, enables a Windows NT Server computer to connect to network-connected print devices that support the AppleTalk protocol, and enables a Windows NT Server computer to function as an AppleTalk router.

**Setup Manager** Setup Manager is a Windows NT tool that is used to create an answer file (`Unattend.txt`) for use in automating the installation of Windows NT. *See also* answer files.

**share name** A share name is a name that uniquely identifies a shared resource on a Windows NT computer, such as a shared folder or printer.

**share permissions** Share permissions control access to shared resources, such as shared folders and shared printers on a Windows NT computer. Share permissions only apply to users who access a shared resource over-the-network.

**shared folder** A shared folder is a folder on a Windows NT computer that can be accessed by other computers on the network because the folder has been configured to be shared and has been assigned a share name.

**single domain model** This domain model consists of one domain, and does not use trust relationships. All user accounts and shared resources are contained within one domain.

**single master domain model** This domain model consists of one master domain that contains all user accounts, and one or more resource domains that contain shared resources. This domain model uses one-way trusts from each resource domain to the master domain. *See also* trust relationship and one-way trust.

**Serial Line Internet Protocol (SLIP)** The Serial Line Internet Protocol (SLIP) is an older connection protocol, commonly associated with UNIX computers, that only supports one transport protocol—TCP/IP. SLIP connections don't support NWLink IPX/SPX Compatible Transport or NetBEUI. The version of SLIP supported by Windows NT 4.0 requires a static IP address configuration at the client

computer—dynamic IP addressing is not supported. Additionally, password encryption is not supported by this version of SLIP. A script file is usually required to automate the connection process when SLIP is used.

**SNMP** SNMP stands for *Simple Network Management Protocol*. The Windows NT SNMP service, once installed on a Windows NT computer, gathers TCP/IP statistics on the local computer and transmits those statistics to any SNMP management station on the network that is correctly configured to receive them. Additionally, installing the SNMP service enables various TCP/IP counters within Windows NT Performance Monitor.

**special groups** Special groups are groups created by Windows NT during installation that are used for specific purposes by the operating system. These groups don't appear in User Manager or User Manager for Domains. Special groups are only visible in Windows NT utilities that assign permissions to network resources, such as a printer's Properties dialog box, and Windows NT Explorer. You can assign permissions to and remove permissions from special groups. You can't assign users to special groups, and you can't rename or delete these groups. Special groups are sometimes called system groups. There are five special groups: Everyone, Interactive, Network, System, and Creator Owner.

**Spooler service** The Windows NT Spooler service manages the entire printing process on a Windows NT computer. The Spooler service performs many of the tasks that are associated with a print server.

**stand-alone server** A stand-alone server is a Windows NT Server computer that is not installed as a domain controller, and that has not joined a Windows NT Server domain.

**static routing** Static routing is basic, no-frills IP routing. No additional software is necessary to implement static routing in multihomed Windows NT computers. Static routers are not capable of automatically building a routing table. In a static routing environment, administrators must manually configure the routing table on each individual router. If the network layout changes, the network administrator must manually update the routing tables to reflect the changes.

**stripe set** A stripe set is a disk configuration consisting of two to thirty-two hard disks. In a stripe set, data is stored, a block at a time, evenly and sequentially among all of the disks in the set. Stripe sets are sometimes referred to as disk strip-

**ing.** Disk striping alludes to the process wherein a file is written, or striped, one block at a time, first to one disk, then to the next disk, and then to the next disk, and so on, until all of the data has been evenly distributed among all of the disks.

**stripe set with parity** A stripe set with parity is similar to a stripe set, but a stripe set with parity provides a degree of fault tolerance that a stripe set cannot. In a stripe set with parity, data is not only distributed a block at a time, evenly and sequentially among all of the disks in the set, but parity information is also written across all of the disks in the set. A stripe set with parity is made up of three to thirty-two hard disks. Like stripe sets, stripe sets with parity are created from identical amounts of free space on each disk that belongs to the set. *See also* stripe set.

**subfolder** A subfolder is a folder that is located within another folder. Subfolders can contain other subfolders, as well as files.

**subnet mask** A subnet mask specifies which portion of an IP address represents the network ID and which portion represents the host ID. A subnet mask enables TCP/IP to correctly determine whether network traffic destined for a given IP address should be transmitted on the local subnet, or whether it should be routed to a remote subnet. A subnet mask should be the same for all computers and other network devices on a given network segment. A subnet mask is a 32-bit binary number, broken into four 8-bit sections (octets), that is normally represented in a dotted decimal format. Each 8-bit section is represented by a whole number between 0 and 255. A common subnet mask is 255.255.255.0. This particular subnet mask specifies that TCP/IP will use the first three octets of an IP address as the network ID, and use the last octet as the host ID.

**synchronization** Synchronization is a process performed by the NetLogon Service. In this process, domain Directory Services database update information is periodically copied from the primary domain controller (PDC) to each backup domain controller (BDC) in the domain.

**Sysdiff.exe** `Sydiff.exe` is a Windows NT utility that is used to automate the installation of applications that don't support scripted installation and that would otherwise require user interaction during the installation process.

**system partition** The system partition is the active primary partition on the first hard disk in the computer. (This is usually the C: drive.) The system partition contains several files that are required to boot Windows NT, including: `ntldr`, `Ntdetect.com`,

`Boot.ini`, and sometimes `Bootsect.dos`, and `Ntbootdd.sys`, depending on the installation type and hardware configuration. *See also* boot partition.

**system policy** The Windows NT system policy file is a collection of user, group, and computer policies. System policy restricts the user's ability to perform certain tasks on any Windows NT computer on the network that the user logs on to. System policy can also be used to enforce certain mandatory display settings, such as wallpaper and color scheme. You can also create a system policy file that applies to users of Windows 95 computers. System policy gives the administrator far more configurable options than a mandatory profile. Administrators can use system policy to provide a consistent environment for a large number of users, or to enforce a specified work environment for "problem users" who demand a significant amount of administrator time.

**System Policy Editor** System Policy Editor is a Windows NT Server tool that is used to edit Windows NT and Windows 95 system policy files. *See also* system policy.

**Task Manager** Windows NT Task Manager is a Windows NT administrative utility that can be used to start and stop applications; to view performance statistics, such as memory and CPU usage; and to change a process's base priority.

**TCP/IP** The *Transmission Control Protocol/Internet Protocol* (TCP/IP) is a widely used transport protocol that provides robust capabilities for Windows NT networking. TCP/IP is a fast, routable enterprise protocol. TCP/IP is the protocol used on the Internet. TCP/IP is supported by many other operating systems, including: Windows 95, Macintosh, UNIX, MS-DOS, and IBM mainframes. TCP/IP is typically the recommended protocol for large, heterogeneous networks.

**TechNet** *Microsoft TechNet* is an invaluable knowledge base and troubleshooting resource. *TechNet* is published monthly by Microsoft on multiple compact discs. *TechNet* includes a complete set of all Microsoft operating system Resource Kits (currently in a help file format), the entire Microsoft Knowledge Base, and supplemental compact discs full of patches, fixes, and drivers (so you don't have to spend time downloading them).

**terabyte** A terabyte is 1,024 gigabytes, or 1,099,511,627,776 bytes.

**terminate-and-stay-resident (TSR) program** A terminate-and-stay-resident program is an MS-DOS program that stays loaded in memory, even when it is not running.

**thread** A thread is the smallest unit of processing that can be scheduled by the Windows NT Schedule service. All applications require at least one thread.

**trust relationship** A trust relationship, or *trust*, is an agreement between two Windows NT Server domains that enables authenticated users in one domain to access resources in another domain. A trust relationship enables users from the trusted domain to access resources in the trusting domain. *See also* one-way trust, trusted domain, trusting domain, and two-way trust.

**trusted domain** The trusted domain is the domain that contains the user accounts of users who want to access resources in the trusting domain. The trusted domain is said to be trusted by the trusting domain. When graphically displaying a trust relationship, an arrow is used to point from the trusting domain to the trusted domain. *See also* trust relationship and trusting domain.

**trusting domain** The trusting domain is the domain that has resources to share with users from the trusted domain. The trusting domain is said to trust the trusted domain. When graphically displaying a trust relationship, an arrow is used to point from the trusting domain to the trusted domain. *See also* trust relationship and trusted domain.

**two-way trust** A two-way trust consists of two one-way trusts between two domains. *See also* one-way trust and trust relationship.

**Unattend.txt** *See* answer files.

**UNC (universal naming convention)** UNC is an accepted method of identifying individual computers and their resources on the network. A UNC name consists of a server name and a shared resource name in the following format: `\\Server_name\Share_name`. *Server\_name* represents the name of the server that the shared folder is located on. *Share\_name* represents the name of the shared folder. A UNC name in this format can be used to connect to a network share. For example, a shared folder named `Public` located on a server named `Server1` would have the following UNC name: `\\Server1\Public`.

**Uniqueness Database Files (\*.UDF)** Uniqueness Database Files (UDFs) are text files, similar to answer files, that make it possible for one answer file to be used for the installation of many computers that have different identifying characteristics. For example, each computer has a different computer name and user name. A UDF, used in conjunction with a network installation startup disk and an answer file, enables

you to fully automate the installation of Windows NT on multiple computers on a network. The UDF is structured like an answer file, and uses the same types of entries that an answer file uses. The UDF has an additional section, named `UniqueIds`. When the appropriate command-line switch is used, selected entries in the UDF replace entries with the same name in the answer file. *See also* answer files.

**UPS** UPS stands for *uninterruptible power supply*. A UPS is a fault-tolerance device that enables a computer to continue operations for a short period of time after a power outage.

**user account** A user account is a record in the Security Accounts Manager (SAM) database that contains unique user information, such as user name, password, and logon restrictions.

**user account database** *See* Security Accounts Manager (SAM) database.

**User Manager** User Manager is a Windows NT Workstation administrative tool that is used to administer user accounts, group accounts, and security policy on a Windows NT Workstation computer.

**User Manager for Domains** User Manager for Domains is a Windows NT Server administrative tool that is used to administer user accounts, group accounts, security policy, and trust relationships for the Windows NT Server domain or for an individual Windows NT Server computer.

**user mode** Within the Windows NT architecture, user mode is referred to as a less privileged processor mode because it does not have direct access to hardware. Applications and their subsystems run in user mode. User mode applications are limited to assigned memory address spaces and can't directly access other memory address spaces. User mode uses specific application programming interfaces (API's) to request system services from a kernel mode component. *See also* application programming interface (API) and kernel mode.

**user name** A user name is the name assigned to a user account in the Security Accounts Manager (SAM) database.

**user policy** A user policy is a collection of Registry settings that restricts a user's program and network options, and/or enforces a specified configuration of the user's work environment.

**user profile** A user profile is a series of Registry settings and folders in the user's profile folder that define a user's work environment. The contents of a user profile include user-specific settings for: Windows NT Explorer, Notepad, Paint, HyperTerminal, Clock, Calculator, and other built-in Windows NT applications; screen saver, background color, background pattern, wallpaper, and other display settings; applications written to run on Windows NT; network drive and printer connections; and the Start menu, including program groups, applications, and recently accessed documents.

**user rights** User rights authorize users and/or groups to perform specific tasks on a Windows NT computer. User rights are not the same as permissions—user rights enable users to perform tasks; whereas permissions enable users to access objects, such as files, folders, and printers. *See also* permissions.

**value** A value is an individual entry in the Windows NT Registry. A value cannot contain keys or other values. *See also* key and Registry.

**verbose mode** Verbose mode refers to running an application in such a way that the application returns the maximum amount of information and detail to the user. The verbose mode is initiated on many applications by using the `/v` switch.

**virtual device driver** A virtual device driver is a 32-bit protected mode device driver that is used in Windows 95 and Windows for Workgroups. Virtual device drivers are not supported by Windows NT.

**virtual memory** Virtual memory is the physical space on a hard disk that Windows NT treats as though it were RAM. *See also* paging file.

**Virtual Memory Manager** Virtual Memory Manager is a Windows NT kernel mode component that manages memory in a Windows NT environment by using demand paging. *See also* demand paging and virtual memory.

**volume** A volume is a logical drive. *See also* logical drive.

**volume set** A volume set is a combination of two to thirty-two partitions that are formatted as a single logical drive. A volume set does not use disk striping to store data on its partitions. *See also* logical drive and stripe set.

**Windows 95** Windows 95 is a 32-bit desktop operating system. This operating system requires the least amount of hardware of all of the Microsoft Windows 4.0

operating systems. Windows 95 is the only Windows 4.0 operating system that fully supports the Plug and Play architecture.

Windows 95 is compatible with many existing software applications. It supports 16-bit and 32-bit Windows-based applications (including legacy applications designed to run on previous Windows operating systems) and MS-DOS-based applications. You can also run applications that require direct access to the hardware on the Windows 95 operating system.

**Windows NT Backup** Windows NT Backup (simply called Backup in the user interface) is a Windows NT administrative tool that is used to back up and restore files, folders, and the Registry on a Windows NT computer. Windows NT Backup requires the use of a tape drive device.

**Windows NT Diagnostics** Windows NT Diagnostics is a Windows NT administrative tool that allows you to view detailed system configuration information and statistics. This tool can help you troubleshoot system configuration problems. Windows NT Diagnostics can also be very useful in determining service and device driver dependencies.

**Windows NT Directory Services** Windows NT Directory Services is a Microsoft catchall phrase that refers to the architecture, features, functionality, and benefits of Windows NT domains and trust relationships. Windows NT Directory Services (often referred to as Directory Services), as implemented in Windows NT 4.0, is not X.500 compliant. However, Microsoft plans on releasing a new version of Windows NT Directory Services, called the Active Directory, that will be X.500 compliant in a future release of Windows NT.

**Windows NT file system (NTFS)** NTFS is the most powerful file system supported by Windows NT. Only Windows NT (both Windows NT Workstation and Windows NT Server) supports NTFS—no other operating systems currently support this file system. Windows NT auditing and security are only supported on partitions that are formatted with NTFS.

**Windows NT Server** Windows NT Server is a powerful 32-bit operating system that is optimized to run on a network file, print, or applications server.

Windows NT Server supports the same software applications as Windows NT Workstation. Additionally, Windows NT Server is the operating system of choice for the Microsoft BackOffice products, including SQL Server, Exchange

Server, and SNA Server. An NT Server computer can support several processors to provide powerful multiprocessing capability.

**Windows NT Server tools** Windows NT Server tools are a collection of Windows NT Server utilities that, when installed on a Windows 95 or Windows NT Workstation client computer, enable a user at the client computer to remotely manage an NT Server computer on the network. The NT Server tools make remote administration of an NT Server computer practical and convenient for many administrators. Windows NT Server tools are also referred to as client-based network administration tools.

**Windows NT Workstation** Windows NT Workstation is a 32-bit operating system that is optimized to run as a desktop operating system. It can also be used on personal computers that are networked in a peer-to-peer workgroup configuration, or on a workstation computer that is part of a Windows NT Server domain configuration.

Windows NT Workstation supports most MS-DOS-based applications, most 16-bit and 32-bit Windows-based applications, POSIX 1. *x* applications, and most OS/2 1. *x* applications. It does not support any application that requires direct hardware access because this could compromise Windows NT Workstation's security. It also does not support software applications that require a terminate-and-stay-resident program or a virtual device driver. Windows NT Workstation is a high-end, powerful operating system that supports multiple processors for true multiprocessing.

**WINS** *Windows Internet Name Service* (WINS) is a Windows NT Server service that provides NetBIOS name resolution services to client computers. A Windows NT Server computer that has WINS installed on it is called a WINS server.

**workgroup** A workgroup is a logical grouping of networked computers in which one or more of the computers has shared resources, such as a shared folder or a shared printer. In a workgroup environment, the security and user accounts are maintained individually on each separate computer.

**Workstation service** The Workstation service is a Windows NT service that enables a Windows NT computer to access shared resources on other computers across the network.