



IP

Every computer requires an IP address to connect to the Internet. IP addresses consist of four sets of numbers from 0 to 255, separated by three dots. For example, "69.77.82.546" or "225.339.175.169". These IP address are assigned by your Internet Service Provider (ISP)



Server

A Server is used to store and share business data centrally and then process requests and deliver data to other computers over a network. This allows the data to be protected and managed centrally rather than the method of storing business data across a handful of PCs. Having a sever allows the managing of users through a domain controller and the managing of resources such as printers. A server can also mean software that serves a function to a client for example Microsoft Exchange server handles email to Outlook.



Domain

A domain contains a group of computers that can be accessed and administered with a common set of rules. For example, a company may require all local computers to be networked within the same domain so that each computer can be seen from other computers within the domain or located from a central server. Setting up a domain may also block outside traffic from accessing computers within the network, which adds an extra level of security.



Network

When you have two or more computers connected to each other, you have a network. The purpose of a network is to enable the sharing of files and information between multiple systems. The Internet could be described as a global network of networks. Computer networks can be connected through cables, such as Ethernet cables or phone lines, or wirelessly.



Back up

A backup is a duplicate copy of computer data or files. If the 'original' version is deleted, corrupted or overwritten the backup copy can be used.

Backups come in two forms:

- A full backup includes a copy of everything held on the system
- An incremental backup includes a copy of new files and files that have changed since the last full backup was taken. An incremental backup includes less data so takes less time to produce than a full backup.

And there are different back up options:

- Network Attached Storage (NAS) devices are storage devices connected to your network that allow the storage and retrieval of data from a centralised location.
- Cloud based backup may be easier to implement as it does not require new hardware. However, moving data across an internet connection is usually slower than using attached storage and requires the data to be encrypted in transit and level of trust with who controls the storage location and the country it is stored in.



Switches

A switch is used to network multiple computers together. Switches made for the consumer market are typically small, flat boxes with 4 to 8 Ethernet ports. These ports can connect to computers, cable or DSL modems, and other switches.

Think of a switch as a crossroads with traffic lights to direct and control the flow of traffic. Switches allow the devices on your computer network to talk to each other. The switch 'switches' the path of the data to ensure it reaches the correct destination.



Firewall

A computer firewall limits the data that can pass through it and protects a networked server or computer from damage by unauthorized users and data. Firewalls can be either hardware or software-based. A router is a good example of a hardware device that has a built-in firewall. Most routers can be configured to limit traffic from certain IP addresses or block requests based on other criteria.

Software programs that monitor and restrict external access to a computer or network can also serve as firewalls. A network firewall only allows authorized traffic from the Internet to flow in and out of the network.



DFS

Distributed File System – A system to make shared network data available on two or more servers over different office sites so that data is accessed by the closest available server to the user. All chosen data is replicated between servers in a way that makes efficient use of bandwidth over slower connections.



Cloud

A generic term for internet services such as data storage or email hosting, held on computer systems not directly under the control of the user. However, there is always a server involved with cloud systems that are normally held in a data centre where there are dozens sometimes hundreds of servers in one location (also called a server farm).



VPN & Site to site connection

A VPN, or Virtual Private Network, allows you to create a secure connection to another network over the Internet. Many businesses today have an additional office or branch offices and connect these offices to the main office over the Internet using a site-to-site VPN connection also known as a VPN tunnels. This provides a secure connection to data exchanged between the sites as well as employees that may be connection to the business via remote connection.



PC's

PC stands for personal computer and typically runs on Windows and occasionally Linux.



Router

Routers are generally small devices that can join multiple computers or networks to the internet. Routers vary in size and power and some connect via wires and some connect via wireless (WiFi) and is referred to as a Wireless Access Point (WAP)



DNS

DNS stands for Domain Name System. This system converts the alphabetical name of a website i.e. SoConnect.co.uk, into and the Numerical IP address for your computer. So, when you type a web address into your browser, DNS servers return the IP address of the Web server associated with that name to your computer.



Printers, Scanners

A printer is a device that prints documents from a computer. Common printers include laser and inkjet printers. Most inkjet printers can produce colour prints, while laser printers are available in both monochrome and colour versions.

A scanner is a device that scans documents and images, which can be imported into a computer. They are available in flatbed where it is one document at a time or sheet-fed versions and are usually connected via a high-speed USB port.



Applications (Web & Desktop difference)

An application, or application program, or even app is a software program that runs on your computer. Applications for computers come in two forms in Web applications form and Desktop applications. Web applications are applications that are used on your computer via an internet connection. Social media applications are the best example of web-based applications.

A desktop application means any software that can be installed on a single computer and used to perform specific tasks. Some desktop applications can also be used by multiple users in a networked environment such as Microsoft word.



OS

Also known as Operating System this is the software that communicates with computer hardware on the most basic level. Without an operating system, no software programs can run. The OS is what allocates memory, processes tasks, accesses disks and peripherals, and serves as the user interface.



VOIP Telephony

Voice Over Internet Protocol. VoIP is basically a telephone connection over the Internet. The data is sent digitally, using the IP address instead of analogue telephone lines. This allows people to talk to one another long-distance and around the world without having to pay long distance or international phone charges.

To use VoIP, you need a computer, an Internet connection, and VoIP software. You also need either a microphone, analogue telephone adapter, or VoIP telephone. Many VoIP programs allow you to use a basic microphone and speaker setup. Others require VoIP phones, which are like regular telephone handsets, but typically connect to your computer via USB.