Internet and computer networks

Today, networks are everywhere and everyone uses them. Networks can be classified according to their size and geographical area they cover. Let’s talk about some types of networks.

PAN (personal area network) is used on a personal level. It’s a smart network that is used for connected devices such as smartphones, tablets and laptops. PANs use wireless technologies such as Bluetooth, Infrared, NFC (near field communication), but can also connect by using a USB cable. This type usually used for transport small files.

LAN (local area network) is a group of devices such as computers, servers, switches and printers, which are located in the same building such as in an office or in a home.

WLAN (wireless LAN) is a LAN that uses wireless communication. A Wireless LAN typically have a WI-FI router or wireless access point. So, WLAN is a LAN, but without using cables.

CAN (campus area network) is a network that joins 2 or more LANs together within a limited area.

MAN (metropolitan area network) is large than a CAN and usually connected using high- speed connection. This type gives the ability for sharing data within a city.

WAN (wide area network) is the largest type of network and it covers a huge geographical area such as a country, a continent. The Internet is an example of a WAN.

Internet technology is a group of technologies that allow users to access information and communication over the World Wide Web. The Internet is a global system of interconnected computer networks that uses protocols to communicate between networks and devices.

Consumers have several options for connecting to the Internet. Fixed Internet access links your computer to an ISP from a stationary point, such as wall socket or roof-mounted antenna. Portable Internet access allows you to easily move your access device and mobile Internet access allows you to use Internet as you are on the go, such as using a smartphone to collect your e-mail while you are traveling by train. You are not necessarily limited to a single Internet access option. Many consumers find it convenient to maintain fixed Internet access for home use, but use portable or mobile method of Internet access while out.

There is a lot of buzz about cloud computing these days. Cloud computing is the idea that consumers use their devices to access applications, storage, and other computing resources supplied by Internet-based servers, rather than from their local devices. The concept of cloud computing is that apps and data are available any time, from anywhere, and on any device.

An intrusion is any access to data or programs by hackers, criminals, or other unauthorized persons. As the result, data can be stolen or altered. Encryption transforms a message in such a way that its contents are hidden from unauthorized readers. Encryption is designed to keep messages secret. A firewall is software or hardware designed to filter out suspicious packets attempting to enter or leave a computer.

Your router has its own IP address. The key point about your IP address is that it is routable. A routable IP address is one that can be accessed by packets on the Internet. A private IP address is non-routable IP address that can be used within a LAN, but not for Internet data transport.