Networks

Networking allows two or more computer systems ti exchange information and share peripherals and resources.

LAN’s are usually placed in the same building. They can be built with two main types of architecture peer-to-peer and client-server. Computers in LAN need to use the same protocol or standard of communication for example Ethernet. LAN’s are based on wires connection, but modern Wi-Fi allow the creation of WLAN’s, where cables are replaced by radio cables.

To build WLAN you need access points and wirelss adapters installed in your computer to link it to the network.

Network topology

Topology refers to the shape of a network. There are three basic topologies.

**Star**: there is a central device to which all the workstations are directly connected called hub.

**Bus**: every workstation is connected to a main cable called a bus.

**Ring**: the workstations are connected to one another in a closed loop configuration.

There are also mixed topologies for example tree A group of stars connected to a central bus.

WAN (Wide Area Network)

WAN’s have no geographical limit and may connect computers or LAN’s on opossite side of the world. They are usually linked through telephone lines, fibre-optic cables, or satelites. The main transmission paths within a WAN are high-speed lines called backbones.

The largest WAN in existance is the internet.