

**Consist of multiple ports** Hub Send data to all ports Topology: physical layout of a **Switch** Send data to exact port network Join multiple networks Router **Intermediary between networks** Small geographic area **Tend to use private connections** as opposed to leased communication lines. LAN (Local Area Network) High data-transfer rate **Client-Server mode** Wi-Fi **Exchange data using radio waves** Small geographic area **WLAN (Wireless Local Area Network)** No wire Logical separate networks **VLAN (Virtual Local Area Partitioning of resources Network)** Independent on medium and physical topology of the network Large geographic area WAN (Wide Area Network) Uses leased communication lines. A collection of private computer networks within a place Intranet No accessible to outside, firewall is used **Global WAN** WWW is a service of the Internet Internet Decentralized by design Access must go through a commercial internet service provider (ISP) Allow outside to access part of the LAN or WAN **Extranet** Firewall is used to control the access rights Secure (data often encrypted) **VPN (Virtual Private Network)** Connect geographically separated offices of a business within a network with all the functionalities of a single LAN A network which consists of computers, (W)PAN ((Wireless) Personal Area mobile phones, iPod, headphones etc. Network) **USB/Bluetooth** are used instead of hub/switch Peers are equally privileged, equipotent (of the same power) participants in the application. P2P (Peer-to-Peer) Decentralized: Both client and server at the same time A network where the nodes are spread out globally. GAN (Global Area Network) For example, the internet. Provide access to storage SAN (Storage Area Network) appears as a device to the OS A network of networks Internet

3.1.1 Different types of Networks