



**Local Area Network (LAN)**

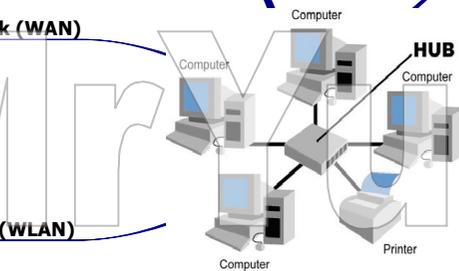
PC's located usually in same building  
Computers connect by cable  
Does not require a modem  
Requires a server

**Wide Area Network (WAN)**

Internet is largest WAN  
PC's connected by telecommunications or wireless  
Normally spread over various distant areas  
Requires a modem  
Requires a phone/dedicated line  
Computers/LANs can be large distances apart

**Wireless Local Area Network (WLAN)**

Links two or more devices using some wireless distribution method  
Usually provides a connection through an access point to the wider internet  
Gives users the mobility to move around within a local coverage area and still be connected to the network



**Network Topologies**

**Line (Bus)**

**Adv of...** It is cheap because less cabling used  
Failure of 1 PC does not affect network  
Easy to implement and extend  
Many user makes network slow

**Disadv of** If central cable breaks, network will go down  
1 virus can affect all computers

**Ring**

**Adv of...** Every computer has equal status  
Requires less cabling than Star  
Cheap to expand  
Fast as data flows in one direction  
Any changes will affect the network  
If the cable breaks, network affected

**Disadv of** If the cable breaks, network affected  
Slower than Star networks  
1 virus can affect all computers

**Star**

**Adv of...** Easy to install & wire  
Can remove PC's without disrupting network  
More suited to larger networks  
Easy to detect faults

**Disadv of** If hub/server fails, network fails  
More expensive to maintain  
1 virus can affect all computers  
Requires more cable length than other topologies

**Hybrid**

Is composed of one or more interconnections of two or more networks that are based upon different physical topologies



**Internet**

Internet - INTERNATIONAL NETWORK  
Is a Wide Area Network (WAN)  
Can access it from anywhere  
Greater amount of information available  
Unlimited access

**Intranet**

Intranet - INTERNAL RESTRICTED ACCESS NETWORK  
Usually a Local Area Network (LAN)  
Password controlled pages  
Behind a firewall  
Can set up specific information pages on Intranet systems  
Information within the school is easily accessible by all users  
Can limit the places where users can go to study  
No wasted time looking through millions of resources  
Intranet is better protected for use of emails/from viruses/from hackers

Used to connect 2 mobile devices to each other **Bluetooth**

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