

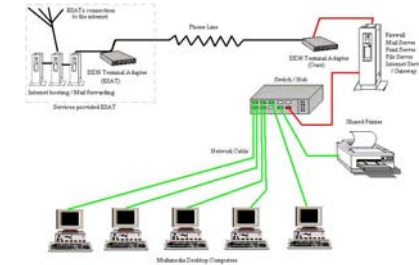
What is a network?

- Two or more computers linked together to share resources
 - Share files, printers, electronic communication etc.
 - Linked through cables, telephone lines, radio waves, satellites or infrared beams.
- Three basic types of networks
 - Local Area Network (LAN)
 - Metropolitan Area Network (MAN)
 - Wide Area Network (WAN)

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Local Area Network

- Network confined to a relatively small geographic area. Typically lab in CA, office etc.
- Typical LAN has a central server which controls the network. Can share resourcesprinters, files. Should be more powerful than the clients.



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Metropolitan Area Network

- Covers larger geographic areas, cities, schools, local libraries, government offices
- Typically uses dedicated phone lines, coaxial cabling and wireless communication

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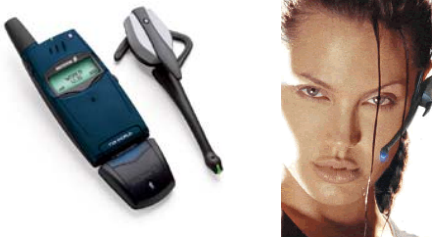
Wide Area Network

- Connects larger geographic areas, such as global companies. Local and global networks are connected to form larger network.
- Typically uses transoceanic or satellite links
- Protocols used can be ATM networks or MPLS (carrying Ethernet) or others.
- Typically use special hardware and special fiber.
- Physical layer can be DWDM

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Personal Area Networks

- Lately, we have seen the growth of PAN's
- Small Networks around you. Typically connects devices together. PDA to laptop. Bluetooth etc.



An early adopter: Lara Croft in Tomb Raider using a Bluetooth enabled phone