

NETWORKING



NETWORK

A network is any collection of computers that communicate with one another over a medium.

Advantages of networking

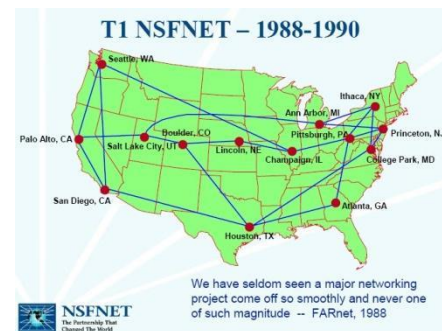
- Resource sharing - files and peripherals
 - Sharing of files and software (Reduced cost of data transfer)
 - Sharing Peripherals
 - Sharing storage
- Communication (Easy and fast communication)
- Access to remote database and sharing of database between various application.

Requirements to setup a network:

1. At least two computers - Server / Client Network Interface Cards (NIC)
2. A connection medium, (Wired / Wireless)
3. Network Operating system software, such as Microsoft Windows NT or 2000, Novell NetWare, Unix or Linux.

1969 - First network came into existence. It was named ARPANET – Advanced Research Project Agency Network

MID 80'S - NSFNET (National Science Foundation Network)



Internet: Internet is a network of networks that facilitate data communication services such as remote login, file transfer, electronic mail, the World Wide Web and newsgroups that are accessible worldwide. It connects many smaller networks together and allows all the computers to exchange information with

each other through a common set of rules for communication. These rules are called protocols and the internet works on a basic protocol i.e. Transmission Control Protocol/Internet Protocol (TCP/IP).

Interspace: It is a client/server software program that allows multiple users to communicate online with real time audio, video and text chat in dynamic 3D environments.

Transmission media is a communication channel that carries the information from the sender to the receiver. It is of 2 types:

1. Guided (Wired) media

- Twisted Pair Cable
- Co-axial Cable
- Fiber-Optical Cable

2. Unguided (Wireless) Media

- Radio waves
- Microwaves
- Infrared
- Satellite