Computer Network

CBSE 12th Computer Science

kwickprep

What is ARPnet? What is NSFnet?

ARPnet(Advanced Research Project Agency Network) was the first network that came into existence in 1969 and was sponsored by US Department of Defense. NSFNET, developed by the National Science Foundation, was a high capacity network and strictly used for academic and engineering research. NSFNET along with ARPANET became the 'backbone' of the internet.

How is tree topology is different from bus topology?

Bus topology is a single length of the transmission medium onto which the various nodes are attached. While tree topology is a variation of bus topology. The shape of the network is an inverted tree with the central root branching and sub branching.

What is computer network? Specify the advantages and disadvantages of the same.

Computer Network- A computer network is a collection of interconnected autonomous computing device so as to exchange information or share resources.

Advantage of computer networks:

- Share resources- such as printers and scanners. Buying such equipment for all the computers ,is very costly. By computer network, we share resources among number of computers.
- Can share software- another advantage of computer network is to install software centrally rather than on each machine.
- Share storage- being able to access files from any machines on the network can share data.
- Improve communications- messages can be sent like email.

Disadvantage of computer networks:

- The systems are more sophisticated and complex to run. You may need specialist staff to run the network.
- If software and files are stored centrally. It may be impossible to carry out any work if the central server fails.
- If networks are badly managed, services can become unusable and productivity fails.
- Network faults can cause loss of data

What are the various types of networks?

A network is an interconnection of several nodes through some communication media with the goal of sharing data, files and resources.
THERE ARE THREE TYPES OF NETWORKS:
- Personal Area Network(PAN)
- Local Area Network(LAN)
- Metropolitan Area Network(MAN)
- Wide Area Network(WAN)

What is the purpose of using router?

A router can work like a bridge and can also handle different protocols. A router can locate the destination required by sending the traffic to another router, if the destination is unknows to itself.