

Types of Computer Network

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Computer network is basically classified into five types, but broadly classified into three types.



1. Local Area Network (LAN):

LAN is a small and single-site network. A LAN connects network devices over a relatively short distance. It is a system in which computers are interconnected and the geographical area such as home, office, building, school may be within a building to 1 km. All the terminals are connected to a main computer called SERVER. On most LAN's cables are used to connect the computers. LANs are typically owned, controlled and managed by a single person or organization. They also use certain specific connectivity technologies, primarily Ethernet and Token Ring.

Wireless LAN or WLAN: is a wireless local Area Network that uses radio waves as its carrier. The last link with the users is wireless to give a network connection to all users in the surrounding area.

2. WIDE AREA NETWORK (WAN)

A WAN is a geographically dispersed collection of LAN's. A WAN like the internet spans most of the world. A network device called a ROUTER connects LAN's to a WAN.

These kinds of networks use telephone lines, satellite links and other long-range communication technologies to connect. In IP networking, the router maintains both a LAN address and a WAN address.

3. Metropolitan Area Network (MAN)

It is a data network designed for a town or a city. It connects an area larger than a LAN, but smaller than a WAN, such as a city, with dedicated or high performance hardware. Its main purpose is to share hardware and software resources by the various users. Cable TV network is an example of metropolitan area network. The computers in a MAN are connected using coaxial cables or fibre optic cables.

4. Personal Area Network (PAN)

PAN refers to a small network of communication. These are used in a few limited ranges, which is in reachability of individual person. For examples of PAN are Bluetooth, wireless USB, Z-wave and Zig Bee.

5. Virtual Private Network (VPN)

A Virtual Private Network (VPN) is a technology that is gaining popularity among

organization communication, but require privacy in their intra-organization communication. VPN is a network that is private but virtual. It is private because it guarantees privacy inside the organization. It is virtual because it does not use real private WANs; the network is physically public but virtually private.

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1. The Ring Topology, the computer in possession of the can transmit data.

- (i) packet (ii) data
- (iii) access method (iv) token

Answer: (iv)

2. Network Components are connected to the same cable in the topology.

- (i) star (ii) ring
- (iii) bus (iv) mesh

Answer: (iii)

3. Two or more computers connected to each other for sharing information form a

- (i) network (ii) router
- (iii) pipeline (iv) tunnel

Answer: (i)

4. What is the use of bridge in network?

- (i) to connect LANs (ii) To separate LANs
- (iii) to control network speed (iv) all the above

Answer: (i)

5. Which of the following is not a network device?

- (i) Router (ii) Switch
- (iii) Modem (iv) Bridge

Answer: (iii)

6. An inter-company network which used to distribute information, documents files and database, is called as

- (i) LAN (ii) Switch
- (iii) WAN (iv) MAN

Answer: (i)

7. A protocol is a set of rules governing a time sequence of events that must take place

- (i) between peers (ii) between an interface
- (iii) between modems (iv) across an interface

Answer: (iv)

8. Networking using fibre optic cable is done as

- (i) It has high bandwidth (ii) It is thin and light
- (iii) It is not affected by electromagnetic
- (iv) All the above

Answer: (iv)

9. What is the function of a modem?

- (i) Encryption and decryption (ii) Converts data to voice
- (iii) Converts analog signals to digitals and vice-versa
- (iv) Serve as a hardware anti-virus

Answer: (iii)

10. A processor that collects the transmissions from several communications media and sends them over a single line that operates at a higher capacity is called

- (i) Multiplexor (ii) bridge
- (iii) hub (iv) router

Answer: (i)