There are several types of computer networks, each designed to serve specific purposes and cater to different scales and requirements.

Here are some commonly used types of computer networks:

Local Area Network (LAN):

A LAN is a network that connects devices within a limited geographic area, such as an office building, school, or home. LANs typically provide high-speed data transfer rates and are commonly used for resource sharing, file sharing, and communication within a small area.

Wide Area Network (WAN):

A WAN spans a large geographic area and connects multiple LANs or other networks together. It utilizes public or private telecommunication infrastructure, such as leased lines or the internet, to enable long-distance data transfer between different locations. WANs are often used by organizations with multiple branch offices spread across different cities or countries.

Metropolitan Area Network (MAN):

A MAN covers a larger geographic area than a LAN but smaller than a WAN. It typically serves a city or metropolitan region, providing connectivity between multiple LANs or other networks. MANs are commonly used by service providers to offer high-speed internet access to businesses and residential areas within a city.

Wireless Local Area Network (WLAN):

A WLAN uses wireless technology, such as Wi-Fi, to connect devices within a limited area without the need for physical cables. WLANs are commonly found in homes, offices, cafes, and public spaces, allowing users to connect their devices to the network wirelessly.

Campus Area Network (CAN):

A CAN is a network that spans multiple buildings or a large university campus. It connects different LANs within the campus, enabling communication and resource sharing between departments and buildings.

Storage Area Network (SAN):

A SAN is a specialized network dedicated to providing high-speed access to centralized storage resources. It allows multiple servers to access storage devices, such as disk arrays or tape libraries, over high-speed connections. SANs are commonly used in data centers and enterprise environments that require large-scale storage and data management.

Virtual Private Network (VPN):

A VPN is a network that provides secure and encrypted communication over a public network, such as the internet. It enables users to establish a private and encrypted connection to a remote network, ensuring privacy and security for data transmission.

Peer-to-Peer Network (P2P):

In a P2P network, devices are connected directly to each other without the need for a central server. Each device can act as a client and a server, allowing users to share resources and files directly with each other. P2P networks are commonly used for file sharing and collaboration.

Intranet and Extranet:

An intranet is a private network that is accessible only to authorized users within an organization. It enables internal communication, document sharing, and access to internal resources. An extranet, on the other hand, extends the intranet to selected external users, such as business partners or customers, providing controlled access to specific resources.

Related posts:

1. What is computer network
2. Data Link Layer
3. Framing
4. Byte count framing method
5. Flag bytes with byte stuffing framing method
6. Flag bits with bit stuffing framing method

7. Physical layer coding violations framing method

8. Error Control in Data link layer

9. Stop and Wait

10. Sliding Window Protocol

11. One bit sliding window protocol

12. A Protocol Using Go-Back-N

13. Selective repeat protocol

14. Net 10

15. Net 9

16. Net 47

17. Net 43

18. OSI vs TCP/IP

19. TCP/IP Reference Model

20. OSI Reference Model

21. Computer Networks Introduction

22. Network Architectures

23. Computer Network Topologies

24. LAN and WAN Protocols

25. Network Address

26. IP Addresses

27. Class Full Addressing

28. Networking Media

29. Networking Devices

30. Structured cabling

31. Types of connectivities in Computer Networks

32. Introduction to Network Operating System(NOS)

33. ARP/RARP

34. Cooperative Caching