DAY 3: 09/10/24

Computer Network Types

Below are the most common types of computer networks that are frequently used today:

1. LAN (Local Area Network)
2. WLAN (Wireless Local Area Network)
3. CAN (Campus Area Network)
4. MAN (Metropolitan Area Network)
5. PAN (Personal Area Network)
6. SAN (Storage Area Network)
7. VPN (Virtual Private Network)
8. WAN (Wide Area Network)

Let's Discuss about each one Detailly:

1. LAN (Local Area Network)

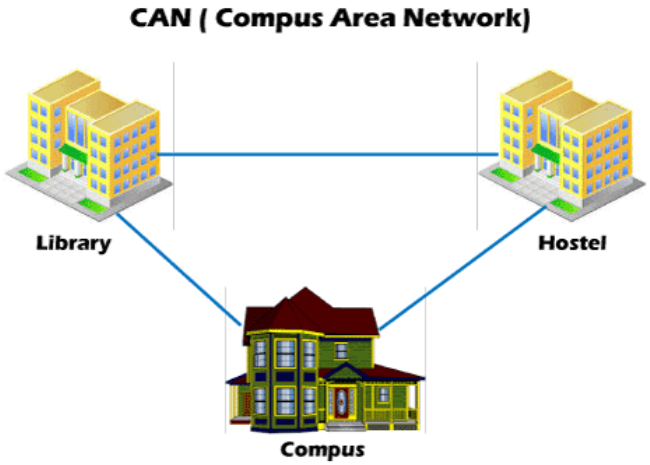
A LAN, or Local Area Network, is a group of devices that connects computers and other equipment, like switches, servers, and printers, over a short distance, such as in an office or home. The most used type of LAN is Ethernet. This network is popular because it allows users to easily transfer and share data, files, and resources.

2.WLAN (Wireless Local Area Network

A WLAN, or Wireless Local Area Network, is similar to a LAN, but it uses wireless communication between devices instead of wired connections. WLANs typically involve a Wi-Fi router or wireless access point to connect devices like smartphones, laptops, and desktops.

3.CAN (Campus Area Network

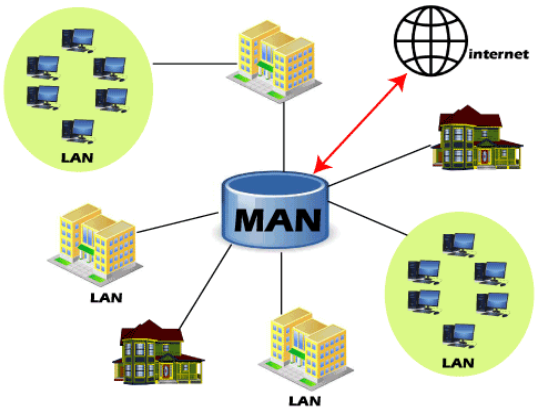
A CAN, or Campus Area Network, is a closed corporate communication network. It can be a mobile network that includes both private and public components. CANs are commonly used in colleges, universities, and corporate sites.



4.MAN (Metropolitan Area Network)

A MAN, or Metropolitan Area Network, is typically a more extensive network compared to LANs but smaller than WANs. This network spans several buildings within the same city. MANs are usually connected via fiber optic cables, providing high-speed connections. They are typically managed by cities and government bodies.

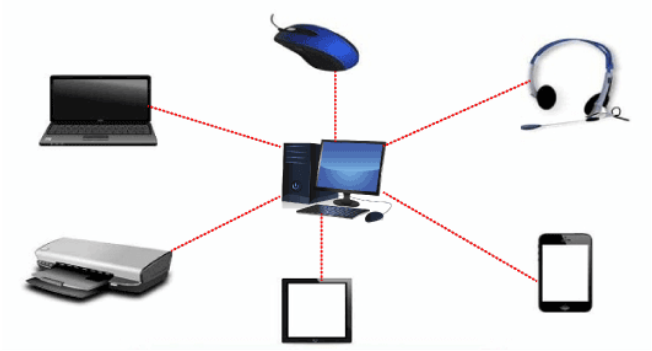
MAN (Metropolitan Area Network)



5.PAN (Personal Area Network)

A PAN, or Personal Area Network, is a type of network designed for personal use, typically serving one person. This network usually connects devices such as smartphones, laptops, and desktops to sync content and share small files, including songs, photos, videos, and calendars. These devices connect via wireless technologies like Wi-Fi, Bluetooth, and infrared.

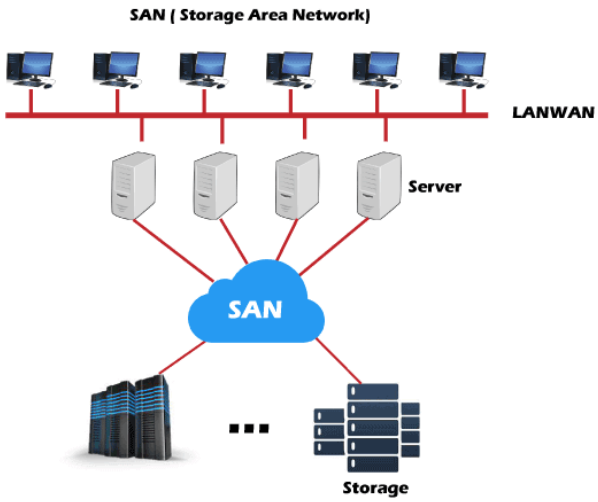
PAN (Personal Area Network)



6.SAN (Storage Area Network)

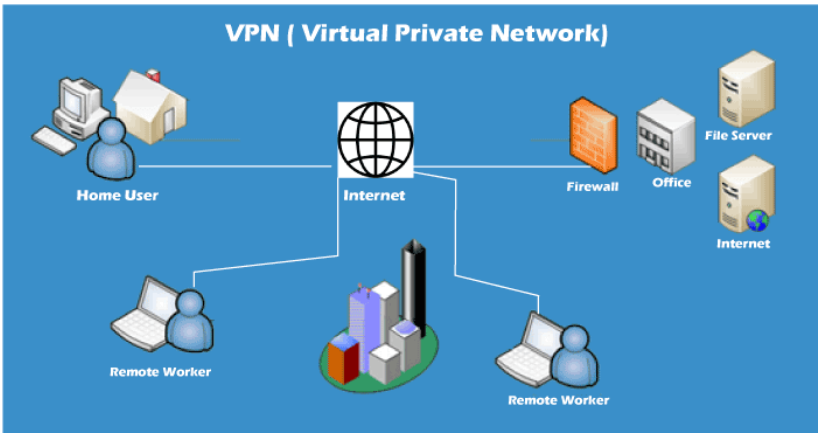
A SAN, or Storage Area Network, is a specialized high-speed network that provides access to block-level storage. It functions as a dedicated shared network for cloud data storage, appearing and operating like a traditional storage drive.

A SAN consists of various switches, servers, and disk arrays. One of its key advantages is fault tolerance, meaning that if a switch or server fails, data can still be accessed.



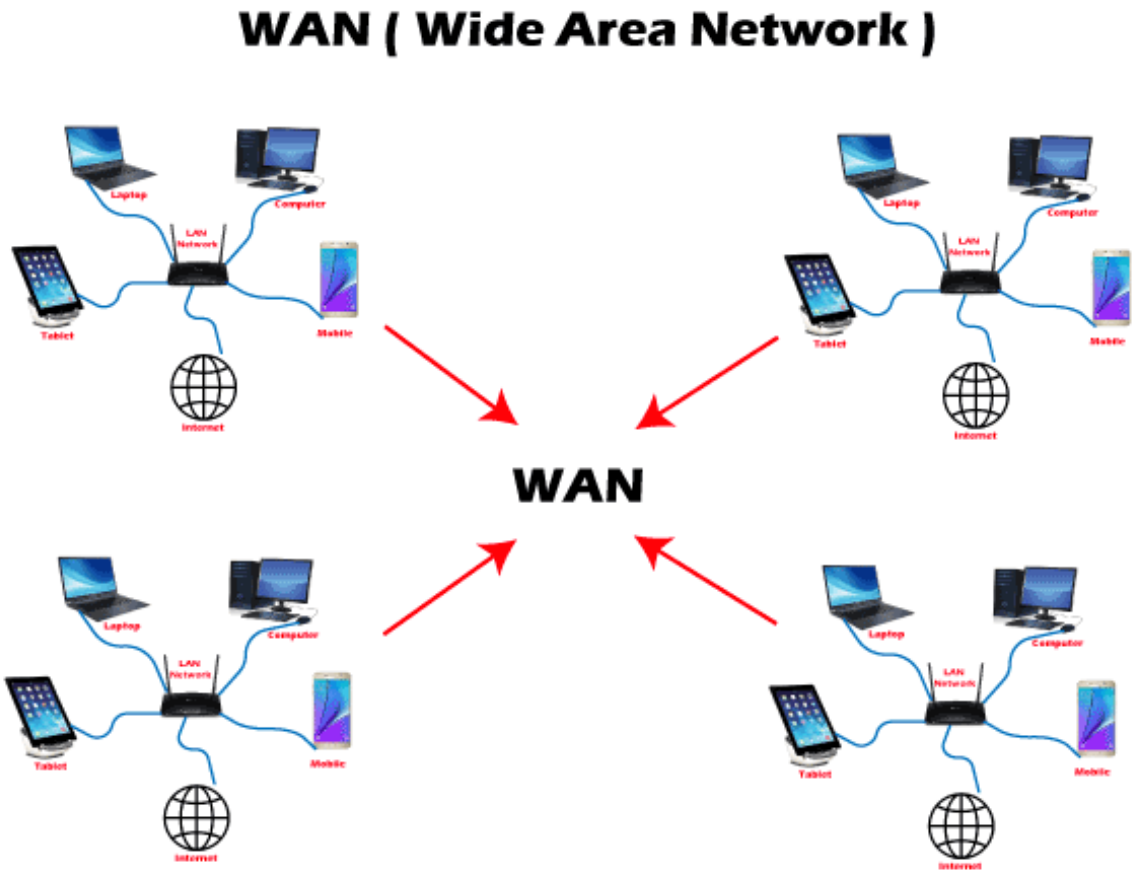
7.VPN (Virtual Private Network)

A VPN, or Virtual Private Network, is a secure tool that encrypts point-to-point internet connections and hides the user's IP address and virtual location. It creates an encrypted network to enhance online privacy, ensuring that users' identities and data remain inaccessible to hackers.



8.WAN (Wide Area Network)

A WAN, or Wide Area Network, is the most significant type of network, connecting computers over large geographical areas, such as countries or continents. WANs include multiple LANs, MANs, and CANs. An example of a WAN is the Internet, which connects billions of computers around the world.



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