# Types of Computer Networks

This document provides a clear and simple explanation of different types of computer networks along with their uses and examples.

**1. Personal Area Network (PAN)**

A Personal Area Network is the smallest type of network and is used around a person's working area.

**Characteristics:**

- Covers 1–10 meters
- Used for personal devices

**Examples:**

- Bluetooth headphones
- Smartwatch connected to mobile phone
- Mobile hotspot

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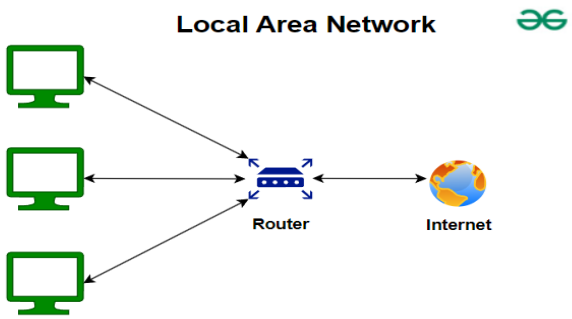
**2. Local Area Network (LAN)**

A Local Area Network is used to connect devices within a small geographical area such as a home, school, or office.




**Characteristics:**

- Covers a building or small area

- High-speed connection

**Examples:**

- Home Wi-Fi
- Office computer network
- School computer lab

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### 3. Wireless Local Area Network (WLAN)

A Wireless LAN is similar to a LAN but uses wireless technology.

**Examples:**

- Home wireless routers
- Wi-Fi in offices, colleges, and restaurants

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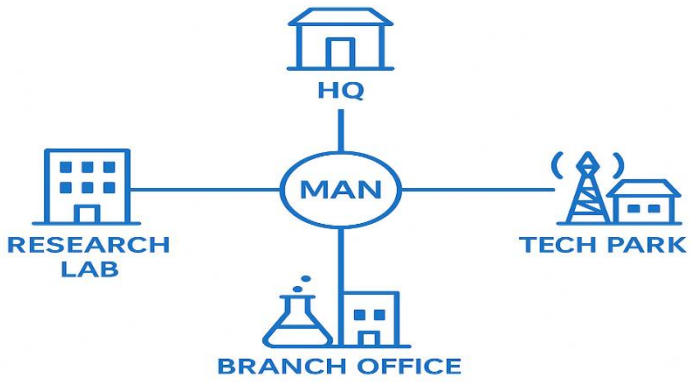
### 4. Metropolitan Area Network (MAN)

A Metropolitan Area Network is larger than a LAN and covers a city or large campus.




**Characteristics:**

- Connects multiple LANs within a city
- Medium-range network

**Examples:**

- University campus network
- City-wide network provided by cable operators

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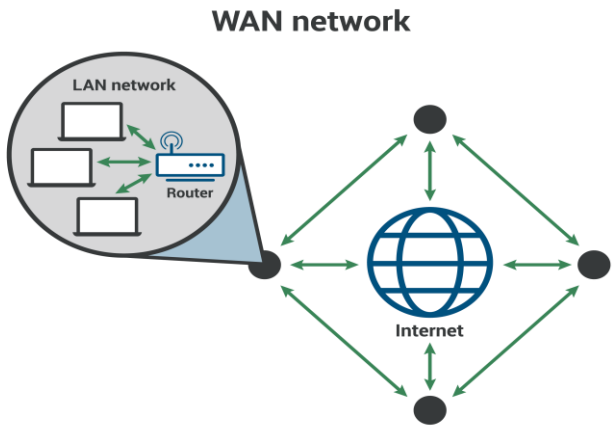
**5. Wide Area Network (WAN)**

A Wide Area Network covers a very large geographical area such as a country or the entire world.




**Characteristics:**

- Connects multiple MANs and LANs
- Long-distance communication

**Examples:**

- The Internet
- Banking networks across cities and countries

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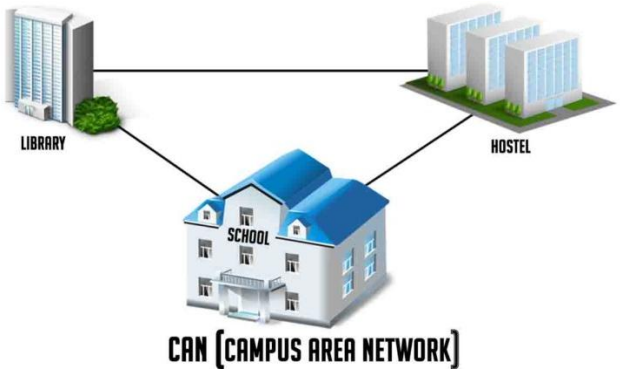
**6. Campus Area Network (CAN)**

A Campus Area Network connects multiple buildings within a campus environment.




**Examples:**

- College or university campus
- Corporate office campus

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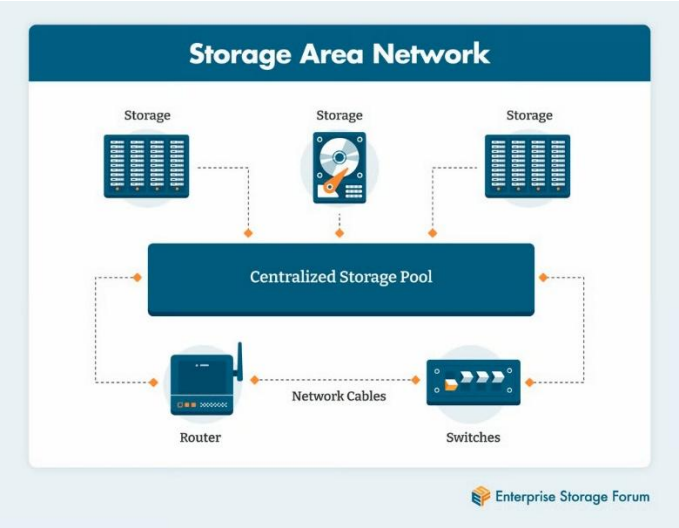
### 7. Storage Area Network (SAN)

A Storage Area Network is a special network used for fast data storage and retrieval.




**Characteristics:**

- Used in data centres
- Connects servers to storage devices

**Examples:**

- Cloud storage infrastructure
- Enterprise data backup systems

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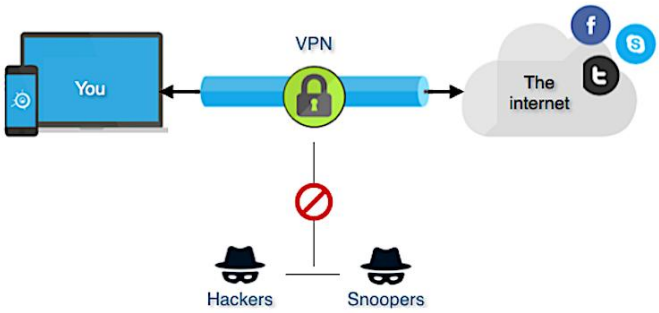
### 8. Virtual Private Network (VPN)

A VPN allows users to create a secure connection over the internet.




**Characteristics:**

- Protects online privacy
- Encrypts data

**Examples:**

- Employees working remotely

- Using apps like NordVPN or ProtonVPN

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**9. Intranet**

An Intranet is a private network used within an organization.

**Characteristics:**

- Accessible only to employees
- Used for internal communication

**Examples:**

- Company internal portals
- Shared internal documents

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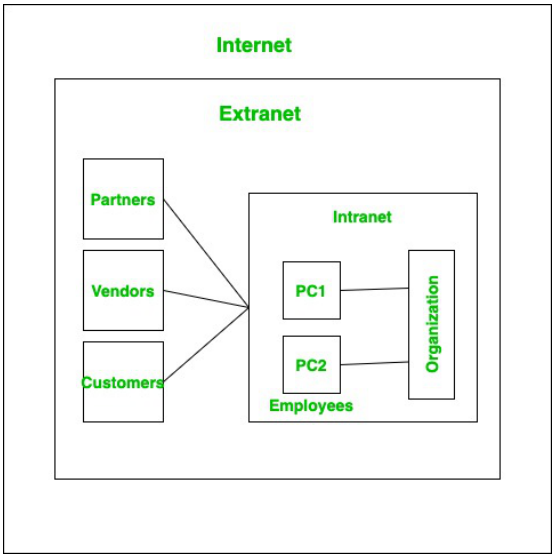
**10. Extranet**

An Extranet is part of an intranet that is shared with external users like business partners.




**Examples:**

- Supplier and vendor portals
- Customer dashboards