

WHAT IS A NETWORK?

- A network is a system that connects multiple devices (computers, servers, printers, etc.) to share data and resources.
- Devices communicate over various media (wired or wireless) using established protocols.
- Networks can range in size from small home networks to vast enterprise networks.



IMPORTANCE OF NETWORKS

- **Why are Networks Important?**
 - **Resource Sharing:** Allows users to share printers, files, and internet connections.
 - **Data Management:** Facilitates centralized data storage and access (e.g., cloud services).
 - **Improved Communication:** Supports communication tools like email, instant messaging, and video conferencing.

TYPES OF NETWORKS (OVERVIEW)

• Classification by Size and Reach:

- **LAN (Local Area Network):** Small geographical area, typically a single building or office.
- **WAN (Wide Area Network):** Spans large distances, interconnecting cities or countries.
- **MAN (Metropolitan Area Network):** Larger than a LAN but smaller than a WAN, typically covering a city.
- **PAN (Personal Area Network):** Very limited range, typically used for personal devices like smartphones, laptops, and Bluetooth connections.
- **WLAN (Wireless LAN):** A local network that uses wireless communication.
- **SAN (Storage Area Network):** Dedicated to storage devices and allows block-level access to data.