

TYPES OF NETWORKS (OVERVIEW)

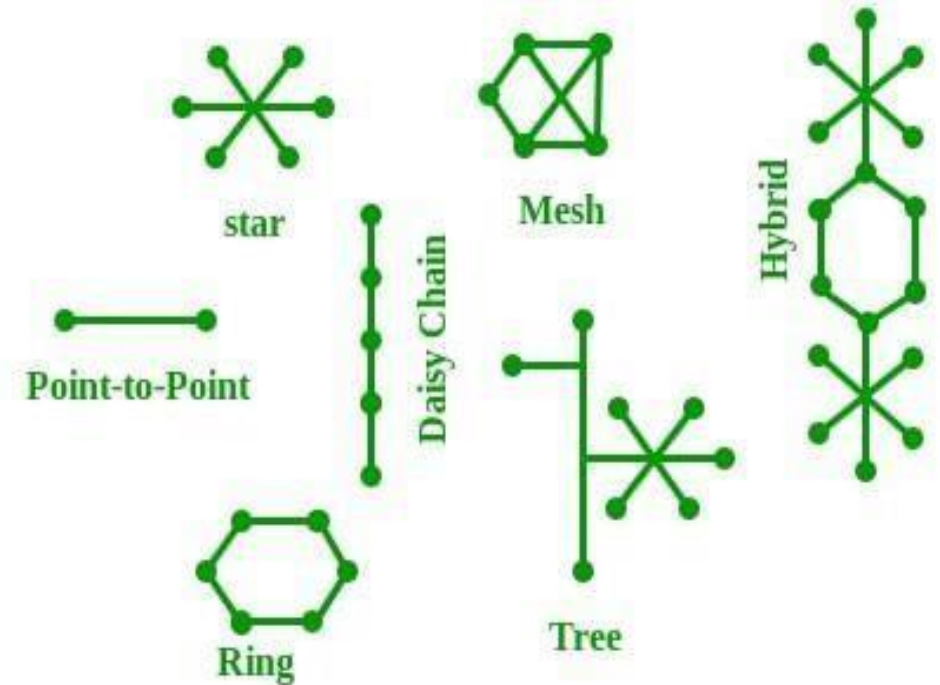
• Classified by Size and Reach:

- **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.

NETWORK TOPOLOGIES

- **Common Topologies:**

- **Star:** All devices are connected to a central hub/
- **Bus:** All devices share a single communication lin
- **Ring:** Devices are connected in a circular format.
- **Mesh:** Devices are interconnected. Highly reliable



WHAT IS NETWORK SECURITY?

- Every company or organization that handles a large amount of data, has a degree of solutions against many cyber threats. This is a broad, all-encompassing phrase that covers software and hardware solutions, as well as procedures, guidelines, and setups for network usage, accessibility, and general threat protection.
- The most basic example of Network Security is password protection which the user of the network chooses. In recent times, Network Security has become the central topic of cyber security with many organizations inviting applications from people who have skills in this area. The network security solutions protect various vulnerabilities of the computer systems such as users, location, data, devices, and applications.

WHAT IS NETWORK SECURITY?

- Any action intended to safeguard the integrity and usefulness of your data and network is known as network security. In other words, Network security is defined as the activity created to protect the integrity of your network and data.
- Network security is the practice of protecting a computer network from unauthorized access, misuse, or attacks. It involves using tools, technologies, and policies to ensure that data traveling over the network is safe and secure, keeping sensitive information away from hackers and other threats.

HOW DOES NETWORK SECURITY WORK?

- Network security uses several layers of protection, both at the edge of the network and within it.
Each layer has rules and controls that determine who can access network resources. People who are allowed access can use the network safely, but those who try to harm it with attacks or other threats are stopped from doing .

