



Network & It's Types



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Bluetooth



Network



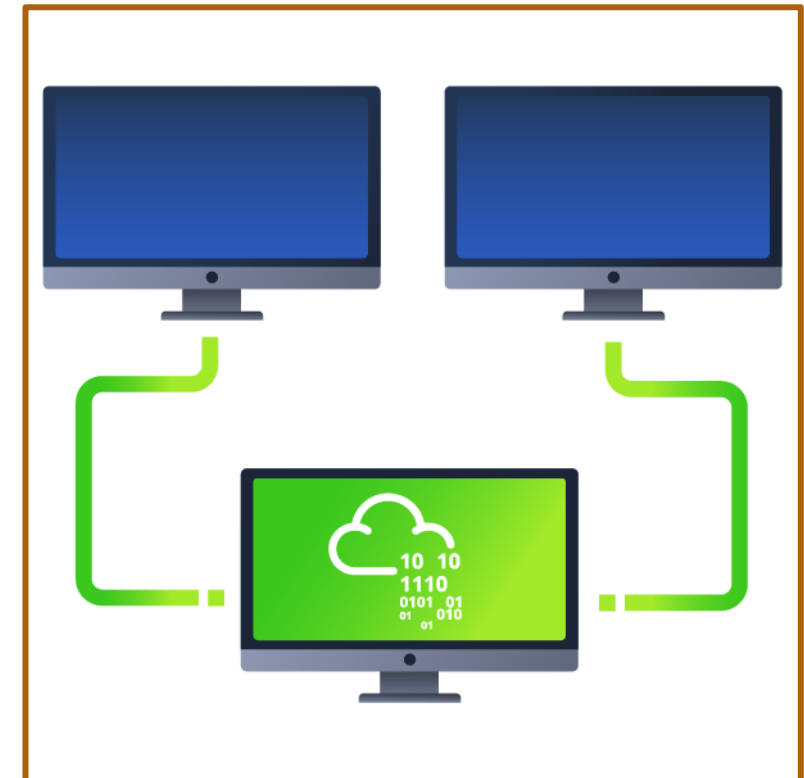
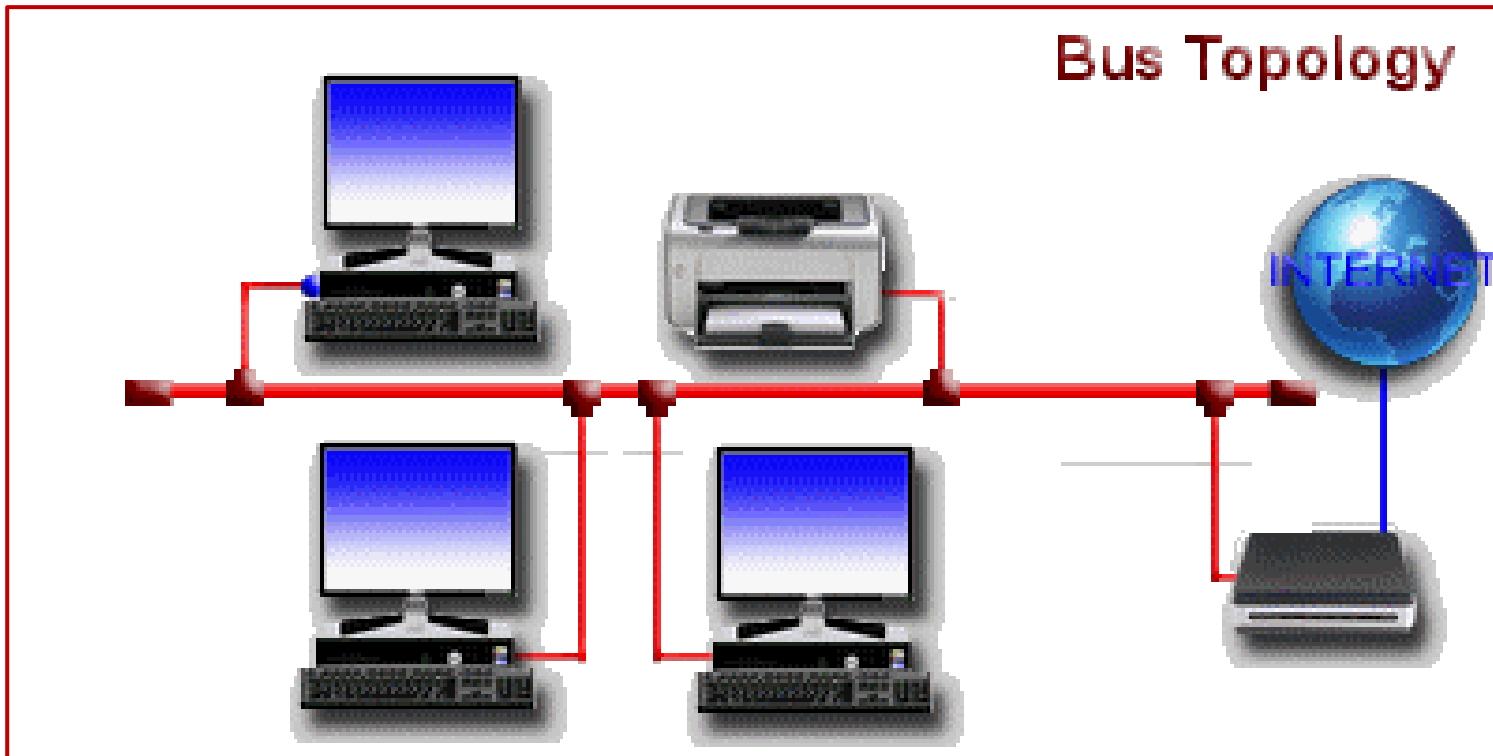
Bluetooth



Network

Network:

A network is a system of interconnected devices (like computers, phones, and printers) that allows them to communicate and share resources, such as files and printers, using a shared medium like **cables** or **wireless** signals.



- Interconnected Devices:**

A network consists of two or more devices that are linked together to exchange data and share resources.

- Shared Medium:**

These devices are connected through a physical or wireless medium, such as cables, Wi-Fi, or satellite connections.

- Resource Sharing:**

Networks enable users to share resources like printers, files, and internet access, making it easier to collaborate and work efficiently.

- Communication:**

Networks facilitate communication between devices, allowing users to send emails, share messages, and collaborate on projects.

Types of Network

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graph TD; A[Types of Network] --> B[PAN]; A --> C[LAN]; A --> D[MAN]; A --> E[WAN]; B --- B1[Personal Area Network]; C --- C1[Local Area Network]; D --- D1[Metropolitan Area Network]; E --- E1[Wide Area Network];
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PAN

Personal
Area Network

LAN

Local Area
Network

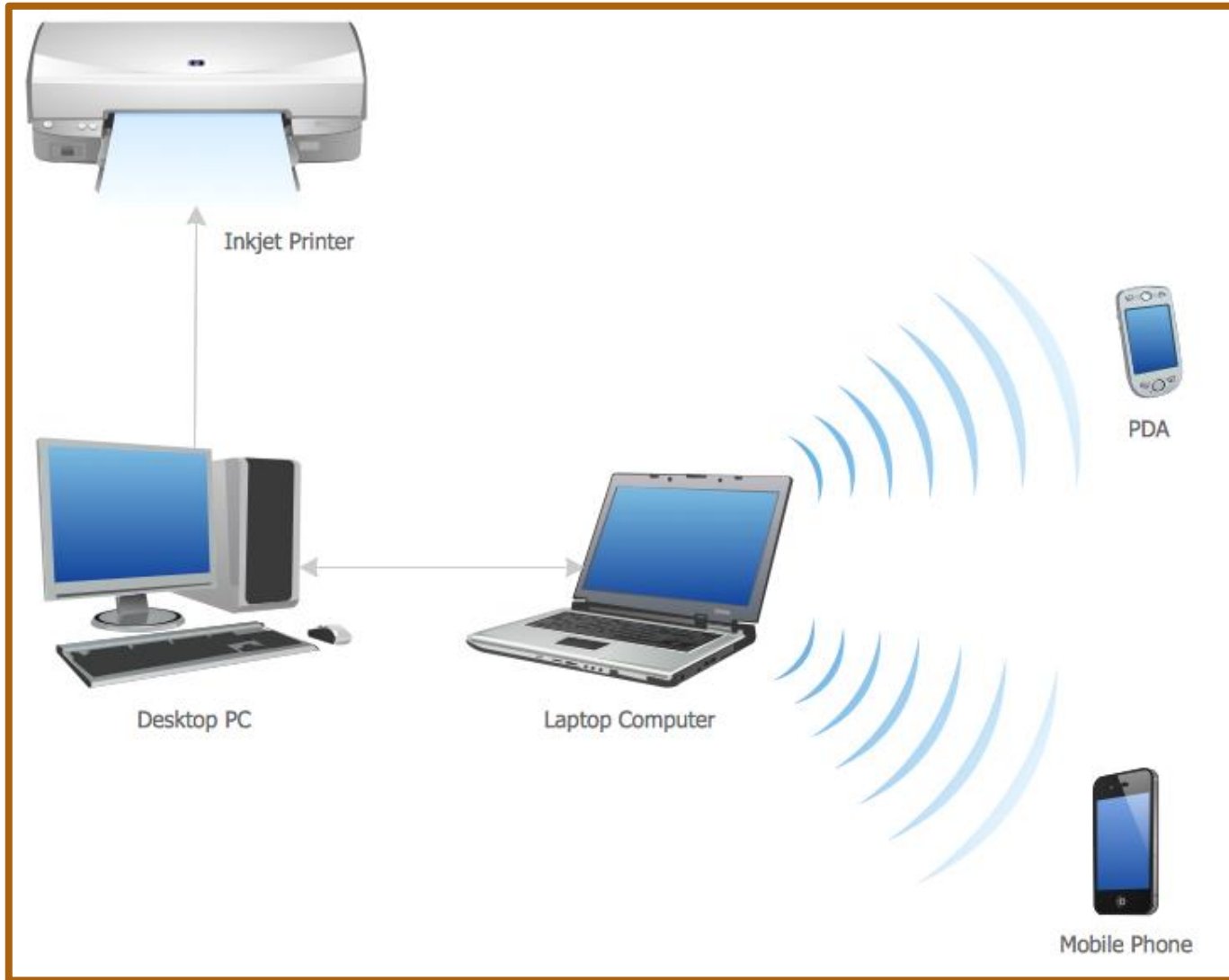
MAN

Metropolitan
Area Network

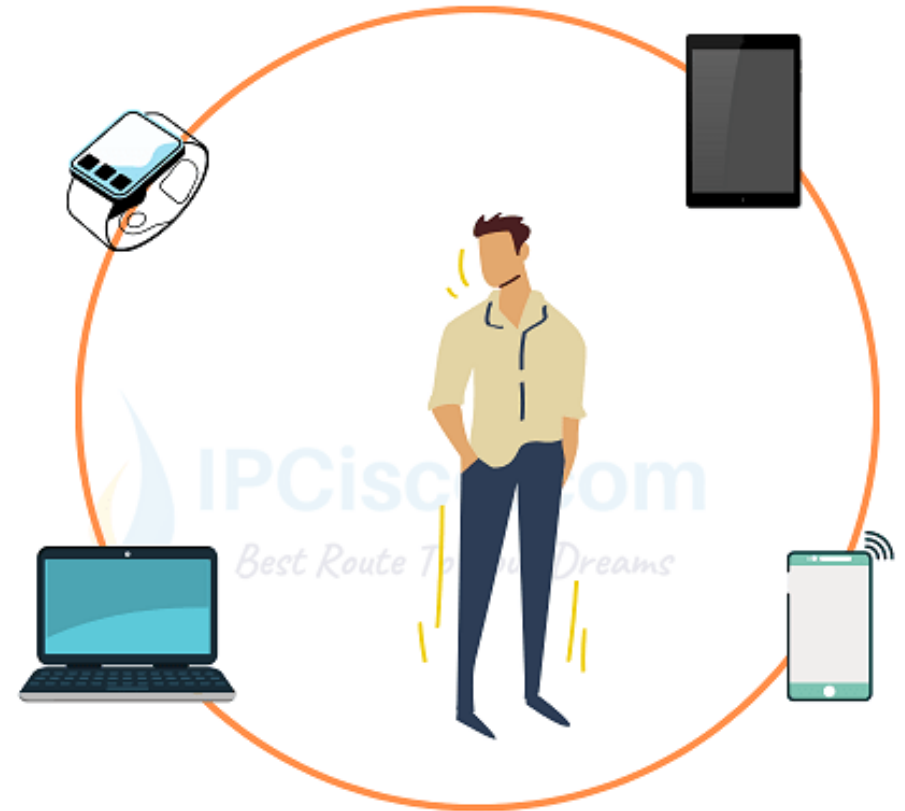
WAN

Wide Area
Network

PAN



Personal Area Network (PAN)



1. Personal Area Network (PAN)

PAN is the most basic type of computer network. It is a type of network designed to connect devices within a short range, typically around one person.

It allows your personal devices, like smartphones, tablets, laptops, and wearables, to communicate and share data with each other.

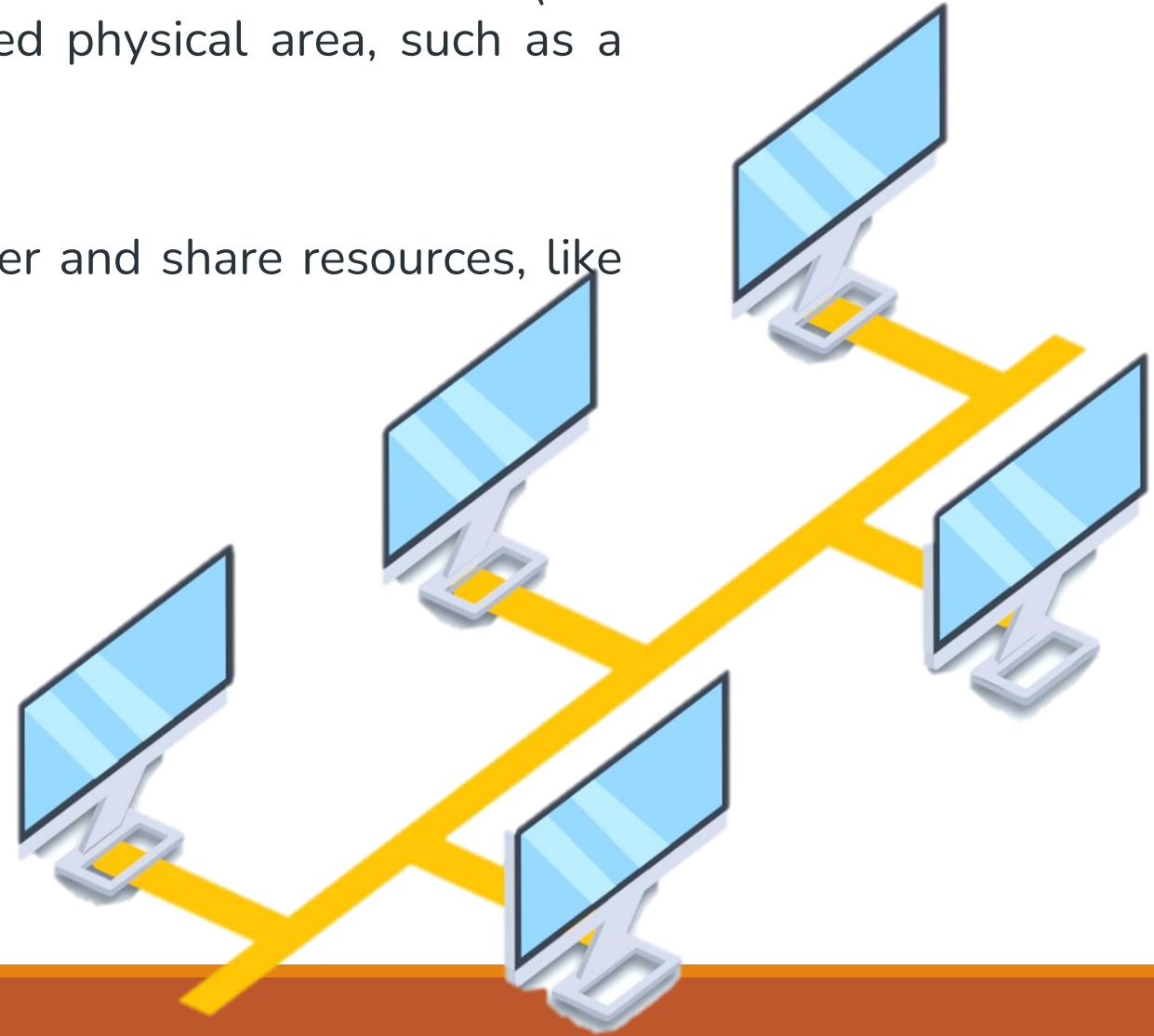
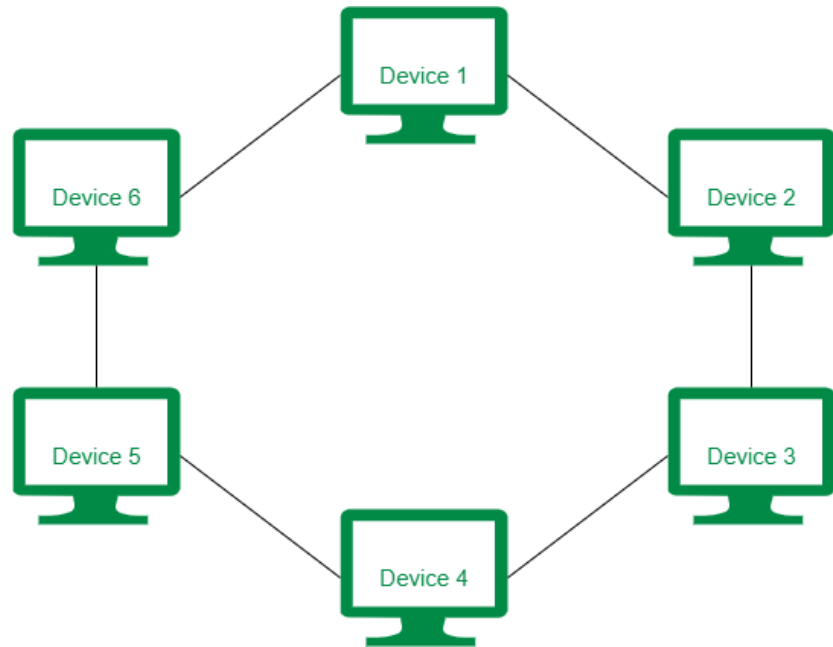
PAN offers a network range of 1 to 100 meters from person to device providing communication.



2. Local Area Network (LAN)

A LAN, or Local Area Network, is a network of interconnected devices (like computers, printers, and servers) within a limited physical area, such as a home, office, or school.

It allows devices to communicate with each other and share resources, like files and printers, within that defined area.



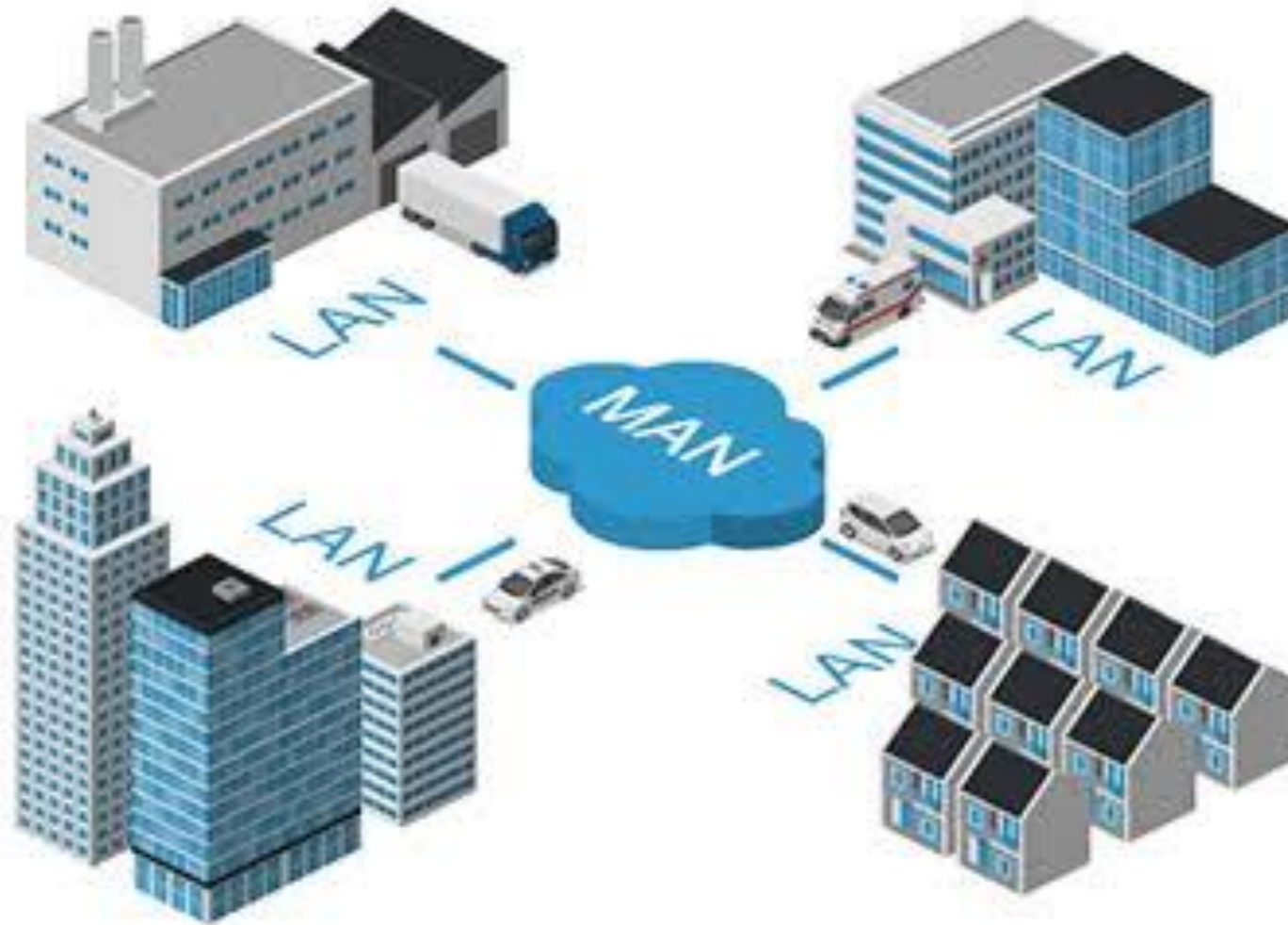
Metropolitan area network (MAN)

GIMS
(Main-Campus)

GIMS
(Phase-3)

GIMS
(Gulabad)

GIMS
(Town)



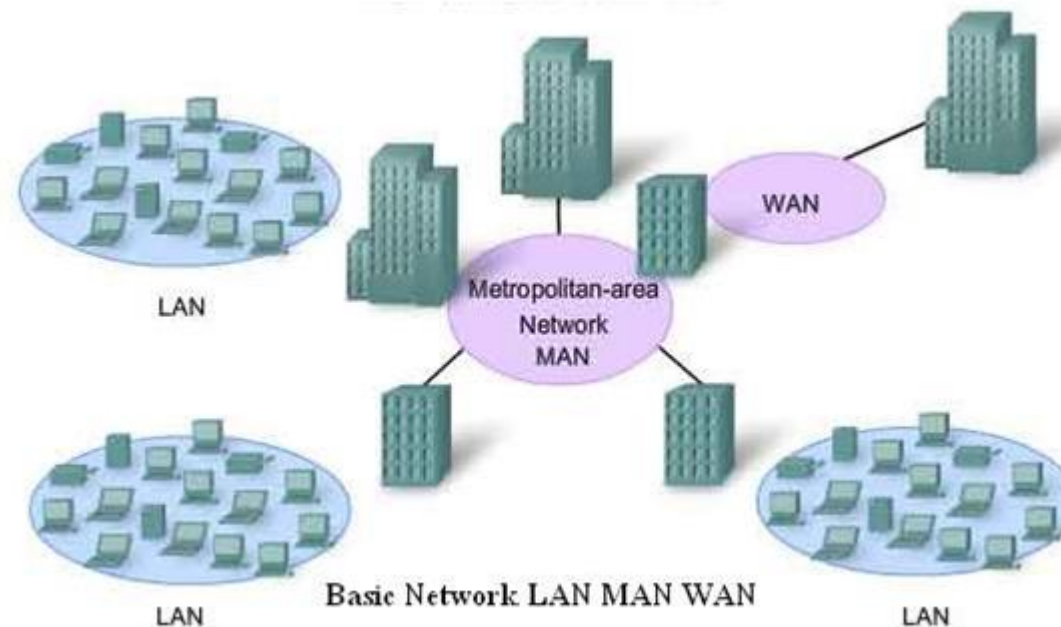
3. Metropolitan Area Network (MAN)

A [MAN](#) is larger than a LAN but smaller than a WAN.

This is the type of computer network that connects computers over a geographical distance through a shared communication path over a city, town, or metropolitan area.

This network mainly uses FDDI, CDDI, and ATM as the technology with a range from 5km to 50km.

Its transmission speed is average. It is difficult to maintain and it comes with a high cost. Examples of MAN are networking in towns, cities, a single large city, a large area within multiple buildings, etc



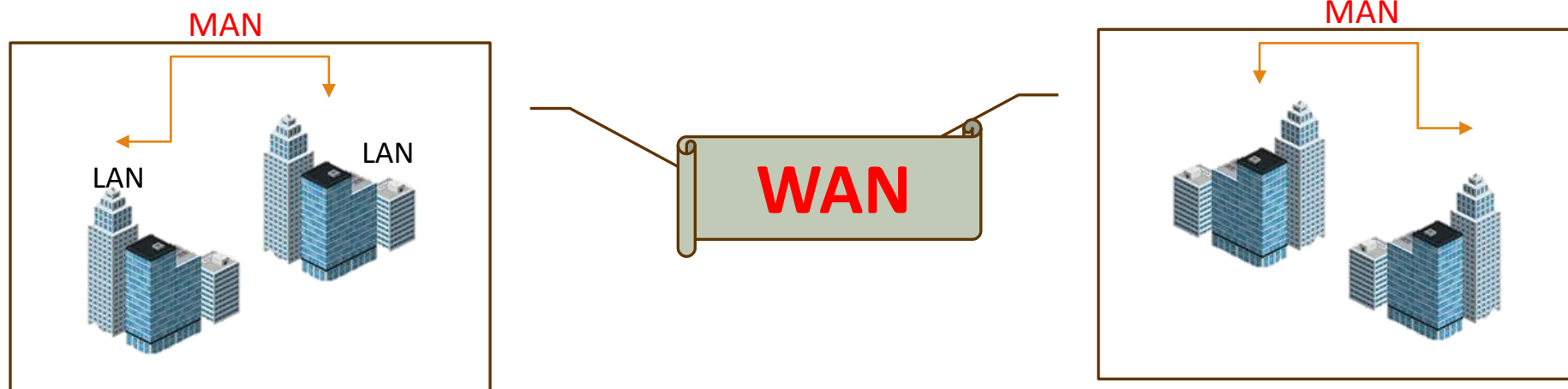
Wide Area Network (WAN)



4. Wide Area Network

A wide-area network (WAN) is a collection of local-area networks (LANs) or other networks (MAN) that communicate with one another. A WAN is essentially a network of networks, with the Internet the world's largest WAN.

A Wide Area Network (WAN) is a telecommunications network that spans a large geographical area, connecting multiple Local Area Networks (LANs) and other networks. It's like a network of networks, enabling communication and data sharing between geographically dispersed locations, such as different branches of a company or even across countries.



END!  