NETWORKING

Network

 Computers: A group of interconnected computers and peripherals that is capable of sharing software and hardware resources between many users. The internet is a global network of network.

TypesofNetwork

**Common types of area networks are:**

* LAN - Local Area Network.
* WAN - Wide Area Network.
* WLAN - Wireless Local Area Network.
* MAN - Metropolitan Area
* Network.
* SAN - Storage Area Network.

Local Area Network

A local-area network is a computer network that spans a relatively small area. Most often, a LAN is confined to a single room, building or group of buildings, however, one LAN can be connected to other LANs over any distance via telephone lines and radio waves.

Wide Area Network

A WAN is a communications network that spans a large geographic area such as across cities, states, or countries. ... The internet is a WAN because, through the use of ISPs, it connects lots of smaller local area network (LANs) or metro area network (MANs).

Wireless Local Area Network

A Wireless Local Area Network is one in which a mobile user can connect to a Local Area Network through a wireless (radio) connection. The IEEE 802.11 group of standards specifies the technologies for wireless LANs

Metropolitan Area Network

A metropolitan area network (MAN) is a computer network that interconnects users with computer resources in a geographic area or region larger than that covered by even a large local area network but smaller than the area covered by a wide area network.

Storage Area Network

A Storage Area Network is a high-speed sub network of shared storage devices. A SAN architecture works in a way that makes all storage devices available to all servers on a LAN or WAN

TOPOLOGY

TOPOLOGY

Network topology refers to the physical or logical layout of a network. It defines the way different nodes are placed and interconnected with each other. Alternately, network topology may describe how the data is transferred between these nodes.

Types of Topology

* Mesh Topology.
* Star Topology.
* Bus Topology.
* Ring Topology.
* Tree Topology.

Mesh Topology

Mesh is a network topology in which devices are connected with many redundant interconnections between network nodes. In a true mesh topology every node has a connection to every other node in the network. There are two types of Mesh topology: Full mesh and partial mesh.

Star Topology

Star topology is a network topology where each individual piece of a network is attached to a central node. The attachment of these network pieces to the central component is visually represented in a form similar to a star. Star topology is known as Star network

Bus Topology

Alternatively referred to as a line topology, a bus topology is a network setup in which each computer and network device are connected to a single cable or backbone. The following sections contain both the advantages and disadvantages of using a bus topology with your devices

Ring Topology

A Ring network is a network topology in which each node connects to exactly two other nodes, forming a single continuous pathway for signals through each node – a ring. Data travels from node to node, with each node along the way handling every packet.

Tree Topology

A network structure in the form of a multipoint electrical circuit, with multiple branches off the trunk of the central, or root, bus, the tree topology is a variation of the bus topology and provides only one path between any two nodes.

BROAD BAND

The term broadband commonly refers to high-speed internet access  that is always on and faster than the traditional dial-up access. Broadband includes several high-speed transmission technologies such as: Digital Subscriber Line (DSL) Cable Modem.

BASEBAND

Baseband refers to the original frequency range of a transmission signal before it is converted, or modulated, to a different frequency range. For example, an audio signal may have a baseband range from 20 to 20,000 hertz.