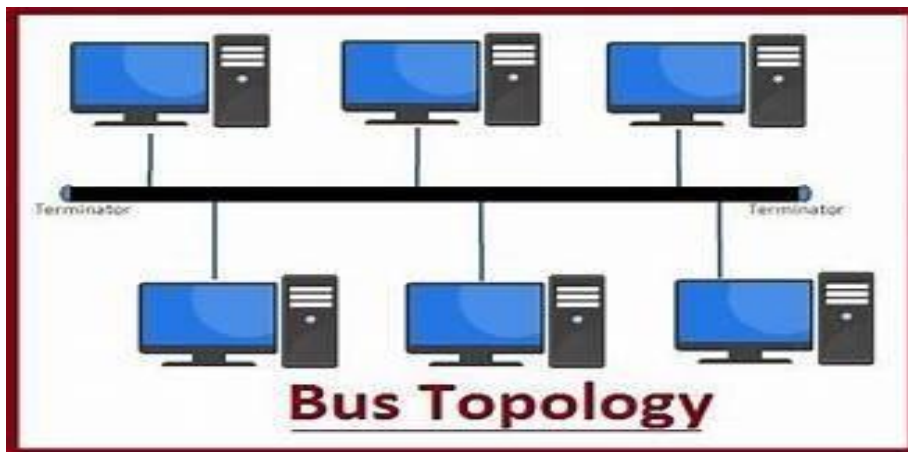


Network Topology

Network topology defines the structure of the network. The physical topology, which is the actual layout of the wire or media, and the logical topology, which defines how the media is accessed by the hosts for sending data.

What is Bus Topology?

Bus - single backbone segment (length of cable) that all the hosts connect to directly



Advantages of Bus Topology:

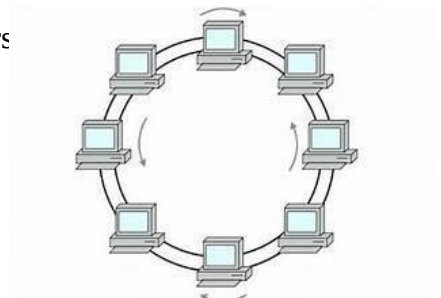
- Use of cable is economical.
- Media is inexpensive and easy to work with System is simple and reliable.
- Bus is easy to extend.

Disadvantages of Bus Topology:

- Network can slow down in heavy traffic Problems are difficult to isolate.
- Cable break can affect many users.

What is Ring Topology?

- Ring - connects one host to the next and the last host to the first



Advantages of Ring Topology:

System provides equal access for all computers Performance is even despite many users

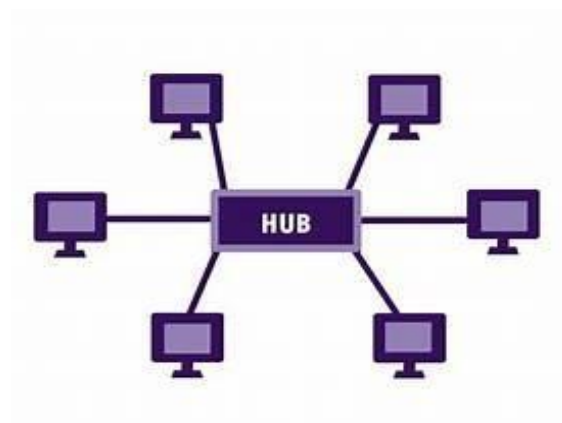
Disadvantages of Ring Topology:

- Failure of one computer can impact the rest of the network.

Problems are hard to isolate.

What is Star Topology?

Star - connects all cables to a central point of concentration.



Advantages of Star Topology

Modifying system and adding new computers is easy.

Centralized monitoring and management are possible.

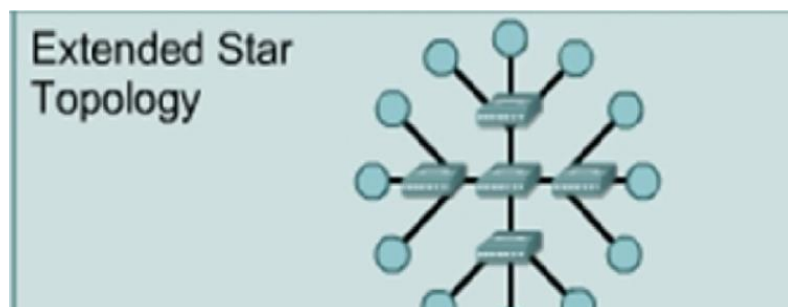
Failure of one computer does not affect the rest of the network.

Disadvantages of Star Topology:

If the centralized point fails, the network fails.

What is Extended Star Topology?

Extended star - uses the star topology to be created, links individual stars together by linking the hubs/switches, extend the length and size of the network.



What is Hierarchical Topology?

Hierarchical - system is linked to a computer that controls the traffic on the topology.

What is Mesh Topology?

Mesh - used when there can be absolutely no break in communications, each host has its own connections to all other hosts.

