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REVIEW PAPER ON NETWORK TOPOLOGIES

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Abstract - This review paper based on to sort out the Topic of Topology. We have to study about the different Topologies in this paper. We have to study the limit of these Topologies in brief. By briefing previous and analyzing existed problems, we also point out the possible review of direction for future works. In this review paper we also have to study about the Hybrid Topology in detail.

I. INTRODUCTION

A Topology is generalized geometric configurations of some class of object that join together with each other. These are different Topologies. These Topologies are the architecture drawings that show the overall physical configurations for the communication system. The term Topology is about the layout to register on the network. It can be shown or considered as the logical “Shape” of the network wiring. Logical shape is not the necessary to considered the actual physical layout on the device on the network.

II. BASIC ARCHITECTURE:

Basic architecture has the different links to complicate the Network Topology. They are:

- ❖ Point to Point
- ❖ Multi Point

POINT TO POINT:

Direct communication between the links, nodes, devices point to point links.

- PC connected to Printer.
- Mainframes terminal connected to Mainframes front end processor.

MULTI POINT:

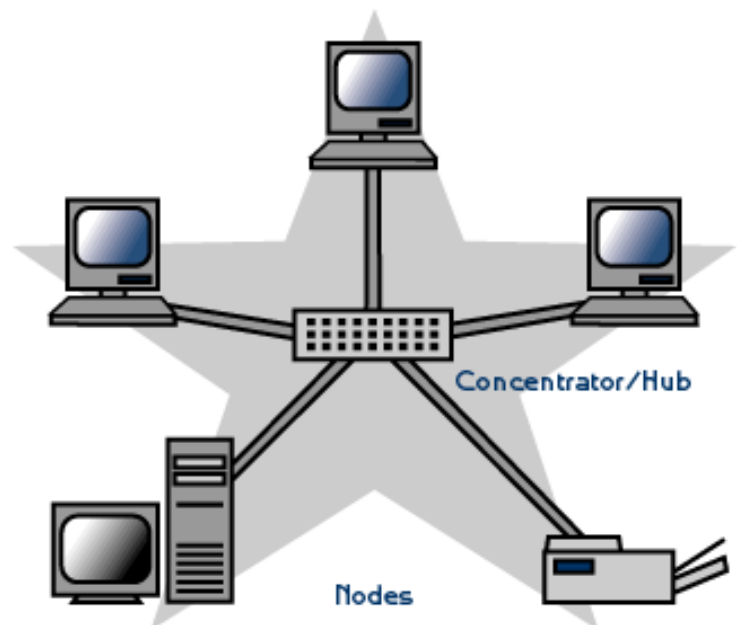
It is the multi type linking. It links the connection between onor more than one two devices, nodes or links.

III. TYPES OF TOPOLOGIES

- Star Topology
- Ring Topology
- Mesh Topology
- Bus Topology
- Tree Topology
- Hybrid Topology

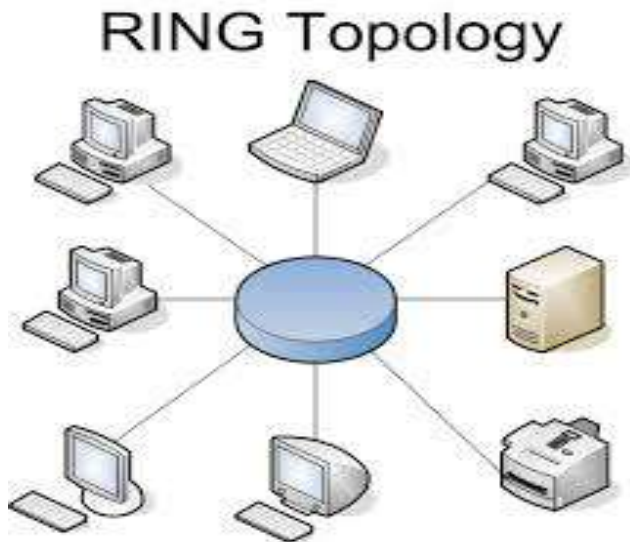
Star topology:

In a star topology network all the nodes are connected to the center server. It is the simplest form. This network is an implementation of the spoke and Distribution Paradigm in the computer network. The hub, switch manages and control all the function of the network. It also acts as the repeater for the data. These configurations are common with the twisted cables and optical cables. In the Star Topology easy to add a new station as each station has own direct cable connection to the Hub.



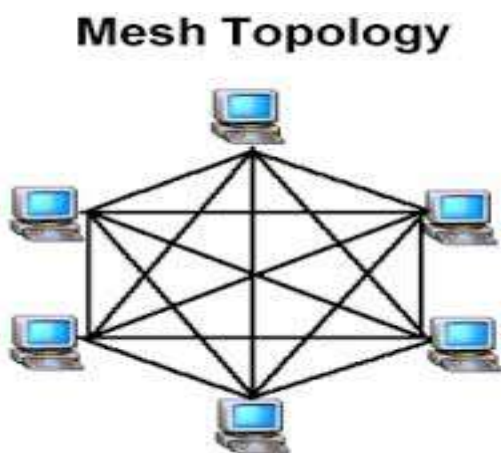
Ring topology

In a ring network every device has exactly two neighbors for communication purpose. All messages travel through a ring in same direction. Ring can be unidirectional there are no terminated ends to the cable. Ring are normally implemented using twisted pair or fiber optic cable. In Ring topology all stations have equal access.



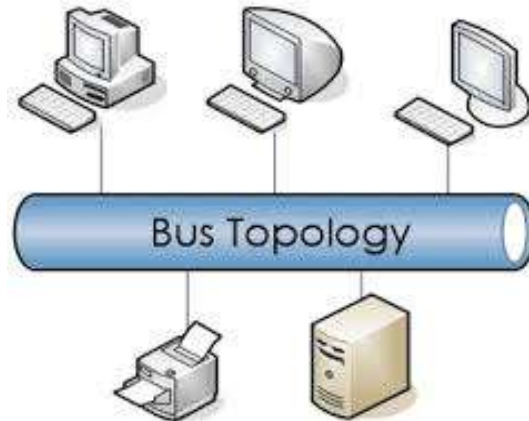
Mesh Topology

In Mesh topology every device has dedicate point to point link to other devices. A mesh topology is often used or MAN and WAN networks. Mesh topology is a high square and reliability each node must have an interface for every other device.



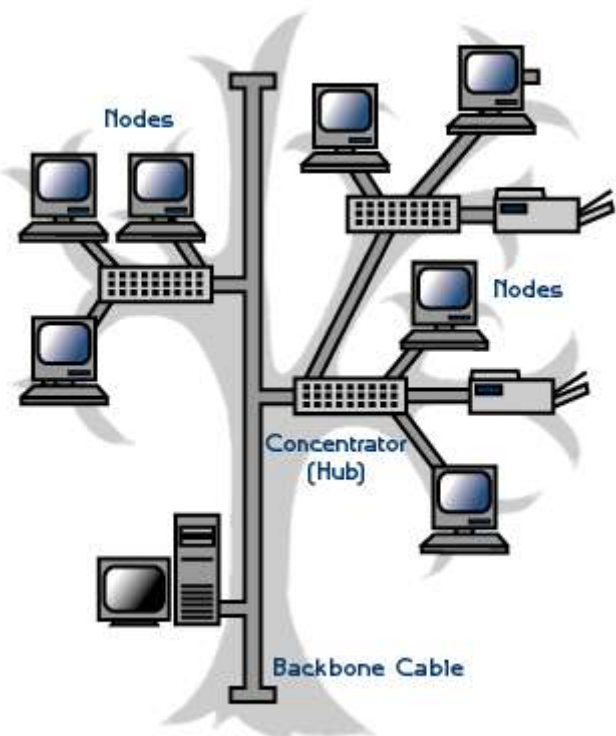
Bus Topology

In Bus Topology all stations are attached to the same cable. In Bus topology message are send in both directions from single point and read by the node identified by the code with message. The cable is terminated at each end. There is no center point of failure on bus because there is no hub.



Tree Topology

Tree Topology is called hierarchical topology. It consisting of group of star configured works stations connected to the linear bus backbone cable. It is a combination of star and bus.



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