

# MESH TOPOLOGY: ADVANTAGES AND DISADVANTAGES

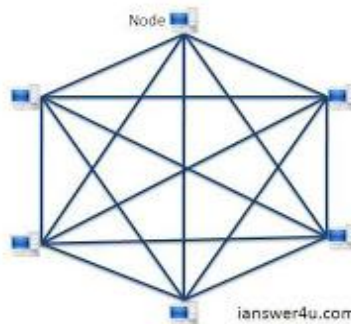
## What is Mesh Topology?

In a mesh network topology, each of the network node, computer and other devices, are interconnected with one another. Every node not only sends its own signals but also relays data from other nodes. In fact a true mesh topology is the one where every node is connected to every other node in the network. This type of topology is very expensive as there are many redundant connections, thus it is not mostly used in computer networks. It is commonly used in wireless networks.

Flooding or routing technique is used in mesh topology.

Types of Mesh Network topologies:-

### 1) Full Mesh Topology:-



Mesh Topology Diagram

In this, like a true mesh, each component is connected to every other component. Even after considering the redundancy factor and cost of this network, its main advantage is that the network traffic can be redirected to other nodes if one of the nodes goes down. Full mesh topology is used only for backbone networks.

## **2) Partial Mesh Topology:-**

This is far more practical as compared to full mesh topology. Here, some of the systems are connected in similar fashion as in mesh topology while rests of the systems are only connected to 1 or 2 devices. It can be said that in partial mesh, the workstations are 'indirectly' connected to other devices. This one is less costly and also reduces redundancy.

## **Advantages of Mesh topology**

- 1) Data can be transmitted from different devices simultaneously. This topology can withstand high traffic.
- 2) Even if one of the components fails there is always an alternative present. So data transfer doesn't get affected.
- 3) Expansion and modification in topology can be done without disrupting other nodes.

## **Disadvantages of Mesh topology**

- 1) There are high chances of redundancy in many of the network connections.
- 2) Overall cost of this network is way too high as compared to other network topologies.
- 3) Set-up and maintenance of this topology is very difficult. Even administration of the network is tough.

Source: <http://www.ianswer4u.com/2011/05/mesh-topology-advantages-and.html#axzz3Qs5RV0Sb>