Topologies

1. Bus Topology: In this network architecture, all the end devices are connected to a central cable called the bus.

This topology works well for small networks

When a message is sent from one device, this message is received by all devices on the network

It is simple and cost effective, easy to install and is efficient over small networks

The limitations are that there is a limit to the number of devices, there are chances of data collision and even a single point failure leads to the failure of the entire network

1. Ring Topology: In this network architecture, a device is exactly connected to two other devices thus forming a closed ring.

The collisions are reduced in comparison to the bus topology and each device has equal axis.

The limitations include the fact the failure of a single device can affect the entire network

1. Star Topology: In the topology, all the end devices are connected to a network device like a switch or a hub. This enables point to point connection.

Failure of one connection does not affect the network.

But failure of the central hub can render the network useless.