

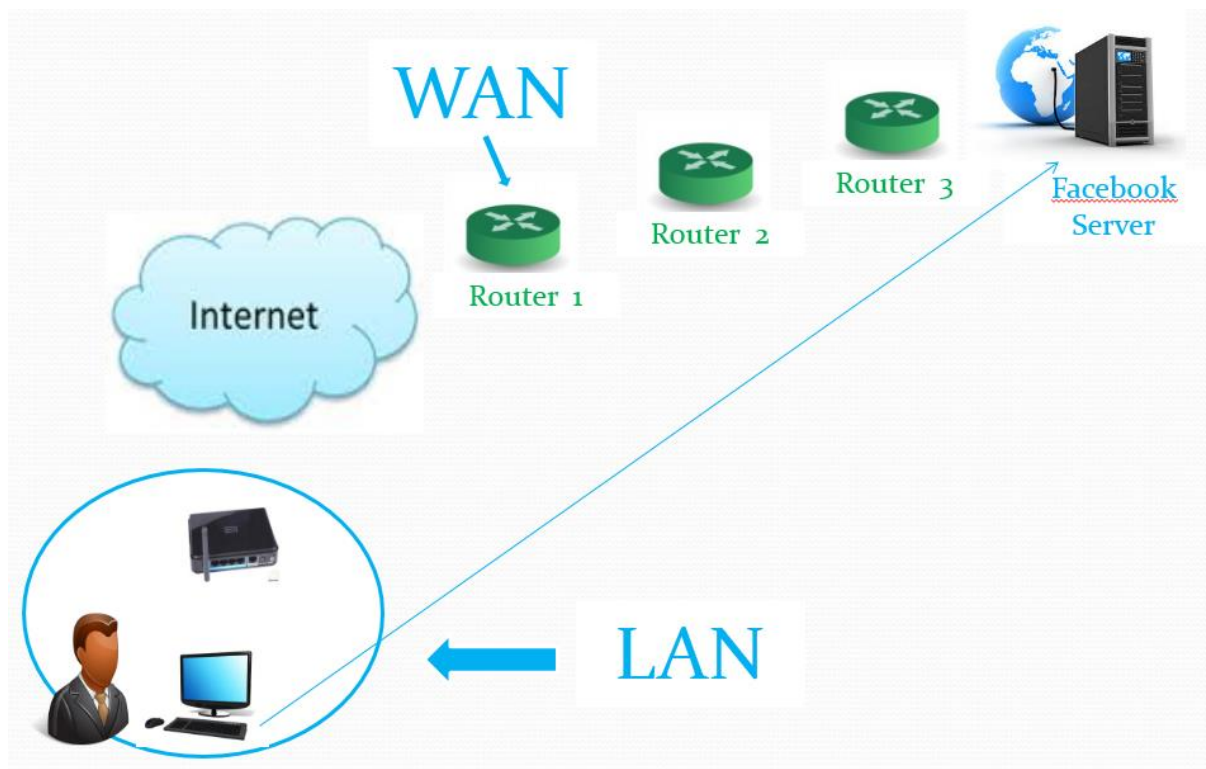
# Routers

Router is a interconnectivity device which is used to forward the data packets between from one network to another network.

- **Layer 3** intelligent device
- **WAN** connectivity device
- Its primary function is to forward the packets by checking its destination address (IP).
- Responsible to forward the data packets from one IP based network to another.
- It is an intelligent device, because it maintains the **Routing Table** for the path selection, through which it can choose the best path for the communication.
- It understands **IP address**, so it forwards the data packets on the basis of IP address of source and destination.
- It stores the network number information in its routing table.
- Responsible to perform path selection.
- Never forwards **broadcast** packets.
- Perform Packet Switching (switch packet from one subnet to another).
- Also responsible for Packet Filtration (Access-Control List)
- Also responsible for Address Translation (NAT).

## Types of Routers

1. Modular
2. Non-modular (Fixed)



**Diagram: To understand the working of router**

## Images

