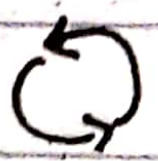


DATA COMMUNICATION

How data is transferred through internet?

- > When we click on a link that information is stored in packets.
- > Each packet is limited in size, so the data or info is stored accordingly.
- > The packets are then labelled with IP address Sender's, Receiver's and Proxy Address.
- > The packets are then launched onto the LAN (Local Area Network).
- > Local Area Network is used to connect all the computers, routers, printer for information exchanged within an office or building.
- > Then the packets reach the Router.
- > The Router provides the packets with the most efficient and the fastest path.
- > When the packets get out of this LAN, they reach the Router Switch.
- > A Router Switch is more faster and efficient as compared to Router.
- > The packets then reach the Proxy Server which acts as a gateway between user and the internet. It is used for many functionalities as well as security and privacy, depending upon the needs and the company policy.

- The proxy checks whether the URL (Web address) of the packet is acceptable or not.
- If it is acceptable the packet reaches the Firewall.
- Firewall is basically a barrier between private internet network and the public internet. It filters out the packets which contains viruses. It also protects a company's sensitive data from being leaked on the internet.
- Now another Router receives the packet and forwards it on the desired network.
- If the packets reach this far in due time a "received message" is sent back otherwise a "timeout message" is sent back.
- The package then finally reaches the internet and is transmitted across the globe through underwater lines.
- At this point on internet there is very little security due to which many dangers are lurked like The Ping Of Death
- The Ping Of Death is basically an oversized or malformed packet used to crash or destabilized the network.
- Finally the packet reaches its destination where it may have to go through another firewall
- This Firewall terminates the ping of death

- One-by-One the information in the packets is received and sent to the web application.
- The packets are then Recycled .