

Network

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Network: An Interconnection of Computers.

Internet is the Physical connection of Internet and wires around the world.

The web is the Information on Internet.

Computers called Servers connected directly to the Internet and stores websites that we used and these websites serve Information. Client request the Information not directly from Servers. Clients connect to a Network provided by ISP(Internet Service Provider) .

I.P. Address: Computer on a network has an Identifier called I.P. address.

Devices that connect to a network has another Identifier called Mac Address.

Data moved in packages in Internet.

WAYS BY WHICH WE CAN CONNECT INTERNET...

- Ethernet Cable:
- Wi-Fi
- Fiber Optic Cables
- A Router connects lots of different devices together and help route the network traffic.
- Package sent to Router and Router utilize Network Protocols to know where it need to be send.
- For package outside network our Router ISP's network and it knows the destination using Network Protocol.
- A network stack: A set of Hardware and Software that provides the Infrastructure for a Computer.

Network Protocol has rules to make sure that it sends to correct address:

- Router efficiency
- Aren't corrupted
- Secure
- Right Machine
- Named appropriately.

IPC/IT

Internet Protocol (IP) is responsible for delivering to the right computer.

TCP handle liable delivery of Network from one Internet to another,

URL Uniform Resource Locator: Web Addresss

www.domain_name.domain_ending

IPv4: 32 Bits 256 Values

IPv6 Adresses 128 bits with it we have 2^{128} possible addresses

NAT: Network Address Translator Lets organizations use one public IP address and many private IP address within the network.

DNS Domain Name System A critical protocol that match IP adress to web address