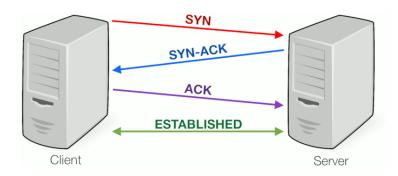
# TCP/IP



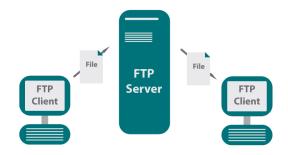
**TCP (Transmission Control Protocol):** Stands for Transmission Control Protocol and Internet Protocol

TCP is connection oriented protocol i.e. first the connection between sender and receiver is established through process called handshake (RTS,CTS, ACK etc.)

TCP divides the large packets to transmit into smaller data packets called datagrams. At the receiving end it also reassemble the packet for form original message.

**IP (INTERNET PROTOCOL)**: responsible for providing address of each computer and performing routing. Each packet is assigned with destination IP address.

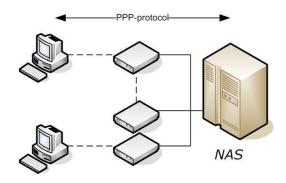
### FTP:



Stands for File Transfer Protocol . It allows transferring of files from one system to another like uploading of file from local machine to web server using FTP Client like FileZilla etc. FTP offers these advantages:

- Useful to transfer files from one network to another
- It is an effective way to get geographically dispersed group to co-operate on a project.
- It is popular way to update web sites.

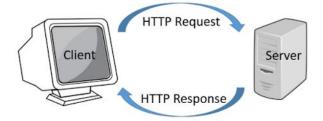
#### PPP:



Dial-in users Modem pool

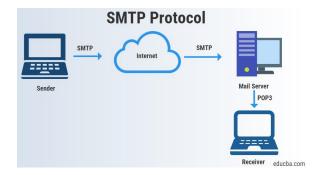
Stands for Point-to-Point Protocol. It is a communication protocol of the data link layer that is used to transmit multiprotocol data between two directly connected (point-to-point) computers. It is a byte - oriented protocol that is widely used in broadband communications having heavy loads and high speeds.

#### HTTP:



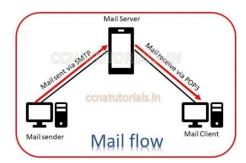
Stands for Hypertext Transfer Protocol. It is used to transfer all files and other data(resources) from one computer to another on the world wide web. Client(Browser) send request to Web Server using HTTP protocol and Server respond back to Client using HTTP i.e. Client and server over web communicate using HTTP protocol.

#### **SMTP:**



Stands for Simple Mail Transfer Protocol. It is a set of communication guidelines that allow software to transmit an electronic mail over the internet. It is a program used for sending messages to other computer users based on e-mail addresses.

#### POP:



Stands for Post Office Protocol (Version-3.0). It is a client/server protocol in which e-mail is received and held for you by your Internet server. Periodically, you (or your client e-mail receiver) check your mail-box on the server and download any mail, probably using POP3. It also allows to download the received messages on local machine using tool like Outlook so that user can read them even when they are not connected to the Internet.

## **VOIP:**



Voice over Internet Protocol. It is a protocol that enables voice communication over the Internet through the compression of voice into data packets that can be efficiently transmitted over data network and then convert back into voice at receiving end. It uses packet switching (store and forward). It is an alternate to traditional telephone network.