



TECHNOLOGY I

TCP/IP GLOSSARY

TELNET is a two-way communication protocol which allows connecting to a remote machine and run applications on it.

FTP(File Transfer Protocol) is a protocol, that allows File transfer amongst computer users connected over a network. It is reliable, simple and efficient.

SMTP(Simple Mail Transport Protocol) is a protocol, which is used to transport electronic mail between a source and destination, directed via a route.

DNS(Domain Name Server) resolves an IP address into a textual address for Hosts connected over a network.

TCP(Transmission Control Protocol) It is a reliable connection-oriented protocol which handles byte-stream from source to destination without error and flow control.

UDP(User-Datagram Protocol) It is an unreliable connection-less protocol that do not want TCPs, sequencing and flow control. Eg: One-shot request-reply kind of service.

IP An Internet Protocol address that is also known as an IP address is a numerical label. It is assigned to each device that is connected to a computer network which uses the IP for communication. Its routing function allows internetworking and essentially establishes the Internet.

HTTP (Hypertext Transfer Protocol) is a foundation of the World Wide Web. It is used for transferring webpages and other such resources from the HTTP server or web server to the web client or the HTTP client.

SNMP (Simple Network Management Protocol) It is a framework which is used for managing the devices on the internet by using the TCP/IP protocol.

ICMP (Internet Control Message Protocol) is used for diagnostics in the network. The Unix program, ping, uses ICMP messages to detect the status of other hosts in the net. ICMP messages can either be queries (in the case of ping) or error reports, such as when a network is unreachable.

TFTP (Trivial file transfer protocol) provides functions similar to ftp, but it does not establish ftp's interactive connection. As a result, users cannot list the contents of a directory or change directories. This means that a user must know the full name of the file to be copied.

Host-to-host communications - IP determines the path a packet must take, based on the receiving host's IP address.



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Packet formatting - IP assembles packets into units known as **IP datagrams**.

Fragmentation - If a packet is too large for transmission over the network media, IP on the sending host breaks the packet into smaller fragments. IP on the receiving host then reconstructs the fragments into the original packet.

Telnet Is the primary method used to manage network devices at the command level.

DHCP (Dynamic Host Configuration Protocol) is used on networks that do not use static IP address assignment (almost all of them). A DHCP server can be set up by an administrator or engineer with a pool of addresses that are available for assignment.

POP3 (Post Office Protocol) is one of the two main protocols used to retrieve mail from a server.

IMAP (Internet Message Access Protocol) is the second of the main protocols used to retrieve mail from a server.

ARP (Address Resolution Protocol) is used to translate virtual addresses to physical ones. The network hardware does not understand the software-maintained IP addresses.