Tcp/IP transport layer (Layer 4 of OSI model)

(UDP)
- → User datagram protocol
- → UDP is connectionless.
- → Does not garantee delivery of packet.

(TCP)
- → Transmission control protocol
- → Packet delivery is garanteed.
- → Disadvantage: Overhead
- → TCP is connection oriented.

(Socket)
- → It is the combination IP address of host, Port number and transport protocol used.

16 bit source port								16 bit destination port
32 bit sequence number								
32 bit acknowledgement number								
Header length	Reserved	C W R	E C E	U R G	A C K	R S T	S Y N	F I N	Window Size
16 bit TCP checksum								16 bit urgent pointer
Options								
Data								

{ TCP format }

→ Number of data segment sender is allowed to send without recieving an ack.

★ **Port number**
- → Port number layer 4 to layer 7.

Well Known Port number ≤ 1023

APPLICATION	PORT NUMBER	TRANSPORT LAYER
HTTP	80	TCP
FTP	21	TCP
FTP Data	20	TCP
Telnet	23	TCP
DNS	53	TCP / UDP
TFTP	69	UDP
SNMP	161	UDP

→ May not be followed strictly by vendors.

Registered ports = 1024 – 49151

Dynamic/Private ports = 49152 – 65535