

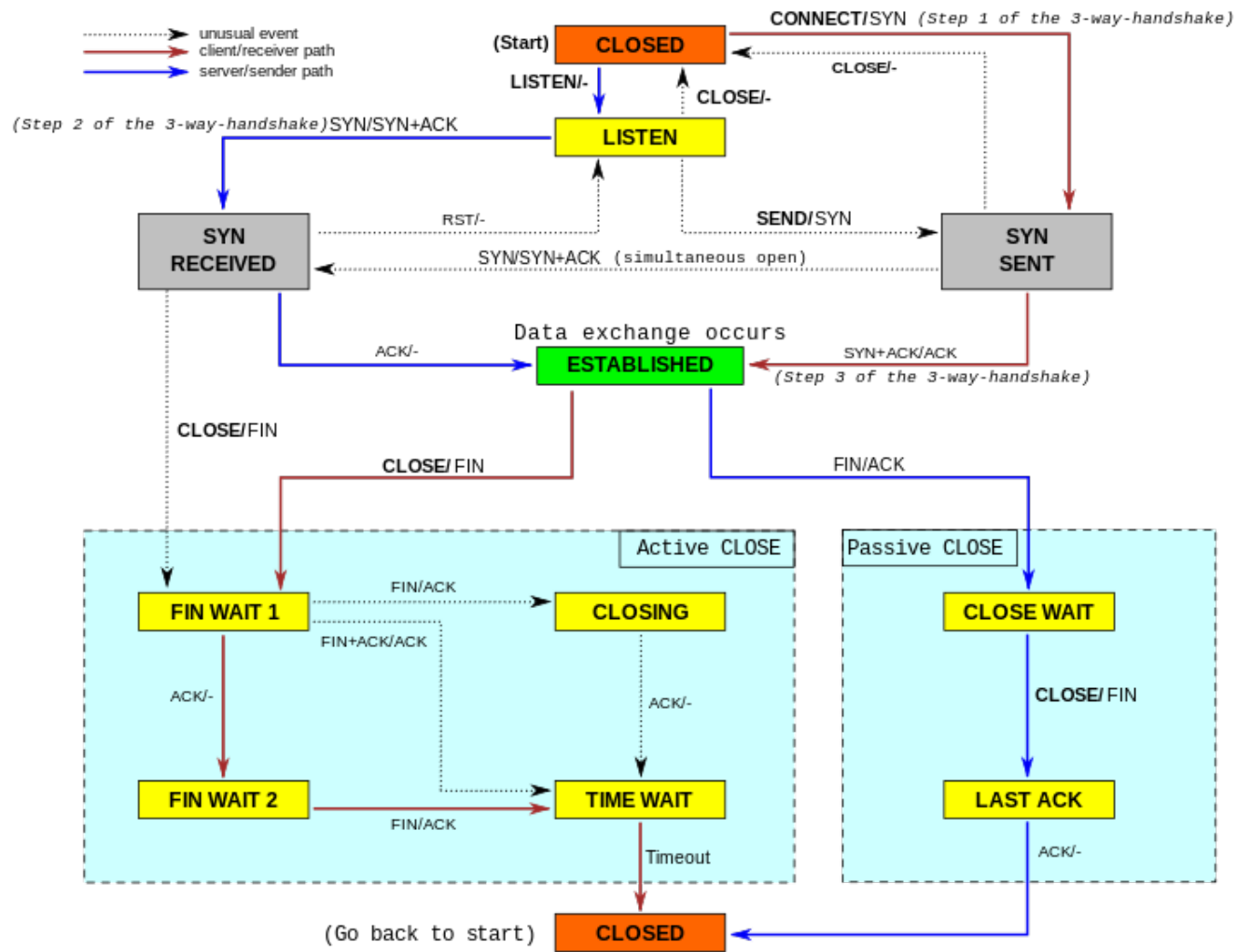
TCP Header

Offsets	Octet	0	1	2	3																													
Octet	<u>Bit</u>	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
0	0	Source port										Destination port																						
4	32	Sequence number																																
8	64	Acknowledgment number (if ACK set)																																
12	96	Data offset			Reserve			N			C			E			U			A			P			R			S			F		
16	128	Checksum																																
20	160	Options (if data offset > 5. Padded at the end with "0" bytes if necessary.)																																
...																																

UDP Header

Offsets	Octet	0	1	2	3																												
<u>Octet</u>	<u>Bit</u>	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
0	0	Source port										Destination port																					
4	32	Length																Checksum															

TCP State Diagram



Address Block	Present Use	Reference
0.0.0.0/8	"This" Network	RFC 1122, Section 3.2.1.3
10.0.0.0/8	Private-Use Networks	RFC 1918
127.0.0.0/8	Loopback	RFC 1122, Section 3.2.1.3
169.254.0.0/16	Link Local	RFC 3927
172.16.0.0/12	Private-Use Networks	RFC 1918
192.0.0.0/24	IETF Protocol Assignments	RFC 5736
192.0.2.0/24	TEST-NET-1	RFC 5737
192.88.99.0/24	6to4 Relay Anycast	RFC 3068
192.168.0.0/16	Private-Use Networks	RFC 1918
198.18.0.0/15	Network Interconnect Device Benchmark Testing	RFC 2544
198.51.100.0/24	TEST-NET-2	RFC 5737
203.0.113.0/24	TEST-NET-3	RFC 5737
224.0.0.0/4	Multicast	RFC 3171
240.0.0.0/4	Reserved for Future Use	RFC 1112, Section 4
255.255.255.255/32	Limited Broadcast	RFC 919, Section 7 RFC 922, Section 7

STD 3 (1989)	Cisco Academy[28]	Kurose,[29] Forouzan[30]	Comer,[31] Kozierok[32]	Stallings[33]	Tanenbaum[34]	Arpanet Reference Model (RFC 871)	OSI model
<i>Four layers</i>	<i>Four layers</i>	<i>Five layers</i>	<i>Four+one layers</i>	<i>Five layers</i>	<i>Five layers</i>	<i>Three layers</i>	<i>Seven layers</i>
"Internet model"	"Internet model"	"Five-layer Internet model" or "TCP/IP protocol suite"	"TCP/IP 5-layer reference model"	"TCP/IP model"	"TCP/IP 5-layer reference model"	"Arpanet reference model"	OSI model
Application	Application	Application	Application	Application	Application	Application/Process	Application Presentation Session
Transport	Transport	Transport	Transport	Host-to-host or transport	Transport	Host-to-host	Transport
Internet	Internetwork	Network	Internet	Internet	Internet		Network
Link	Network interface	Data link	Data link (Network interface)	Network access	Data link	Network interface	Data link
		Physical	(Hardware)	Physical	Physical		Physical

Polprog 2018, compilation based on:

https://en.wikipedia.org/wiki/Reserved_IP_addresses
https://en.wikipedia.org/wiki/Transmission_Control_Protocol
https://en.wikipedia.org/wiki/User_Datagram_Protocol
https://en.wikipedia.org/wiki/Internet_protocol_suite
<https://tools.ietf.org/html/rfc5735.html>