



TCP Flags

C E U A P R S F

Congestion Window

C 0x80 Reduced (CWR)

E 0x40 ECN Echo (ECE)

U 0x20 Urgent

A 0x10 Ack

P 0x08 Push

R 0x04 Reset

S 0x02 Syn

F 0x01 Fin

Congestion Notification

ECN (Explicit Congestion Notification). See RFC 3168 for full details, valid states below.

| Packet State | DSB | ECN bits |
|-------------------|-----|----------|
| Syn | 0 0 | 1 1 |
| Syn-Ack | 0 0 | 0 1 |
| Ack | 0 1 | 0 0 |
| No Congestion | 0 1 | 0 0 |
| No Congestion | 1 0 | 0 0 |
| Congestion | 1 1 | 0 0 |
| Receiver Response | 1 1 | 0 1 |
| Sender Response | 1 1 | 1 1 |

TCP Options

- 0 End of Options List
- 1 No Operation (NOP, Pad)
- 2 Maximum segment size
- 3 Window Scale
- 4 Selective ACK ok
- 8 Timestamp

Checksum

Checksum of entire TCP segment and pseudo header (parts of IP header)

Offset

Number of 32-bit words in TCP header, minimum value of 5. Multiply by 4 to get byte count.

RFC 793

Please refer to RFC 793 for the complete Transmission Control Protocol (TCP) Specification.