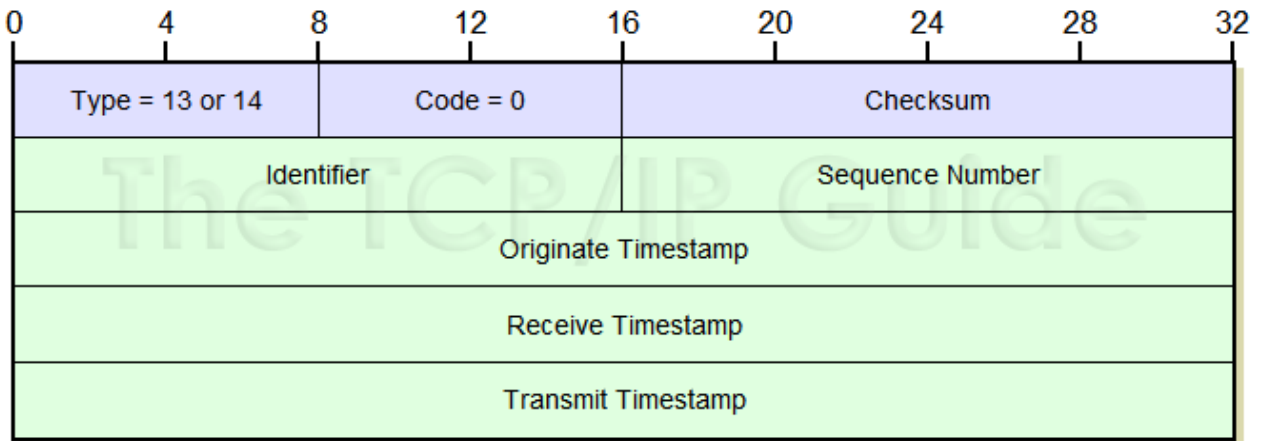


**TCP Time Stamp**



**Kind.** 8 bits. Set to 8.

**Length.** 8 bits. Set to 10.

**Timestamp Value (TS val).** 32 bits.

This field contains the current value of the timestamp clock of the TCP sending the option.

**Timestamp Echo Reply (TS ecr).** 32 bits.

This field is only valid if the ACK bit is set in the TCP header. If it is valid, it echos a timestamp value that was sent by the remote TCP in the TS val field of a Timestamps option.

When TS ecr is not valid, its value must be zero.

The TS ecr value will generally be from the most recent Timestamp option that was received; however, there are exceptions that are explained below.

A TCP may send the Timestamp option in an initial SYN segment (i.e., segment containing a SYN bit and no ACK bit), and may send a TS opt in other segments only if it received a TS opt in the initial SYN segment for the connection.

The TCP time-stamp option provides improved TCP round-trip time measurements.

Because the time stamps are always sent and echoed in both directions and the time-stamp value in the header is always changing, TCP header compression will not compress the outgoing packet.

To allow TCP header compression over a serial link, the TCP time-stamp option is disabled.

Use the ip tcp timestamp command to enable the TCP time-stamp option.

