

### *Maximum Segment Lifetime (MSL)*

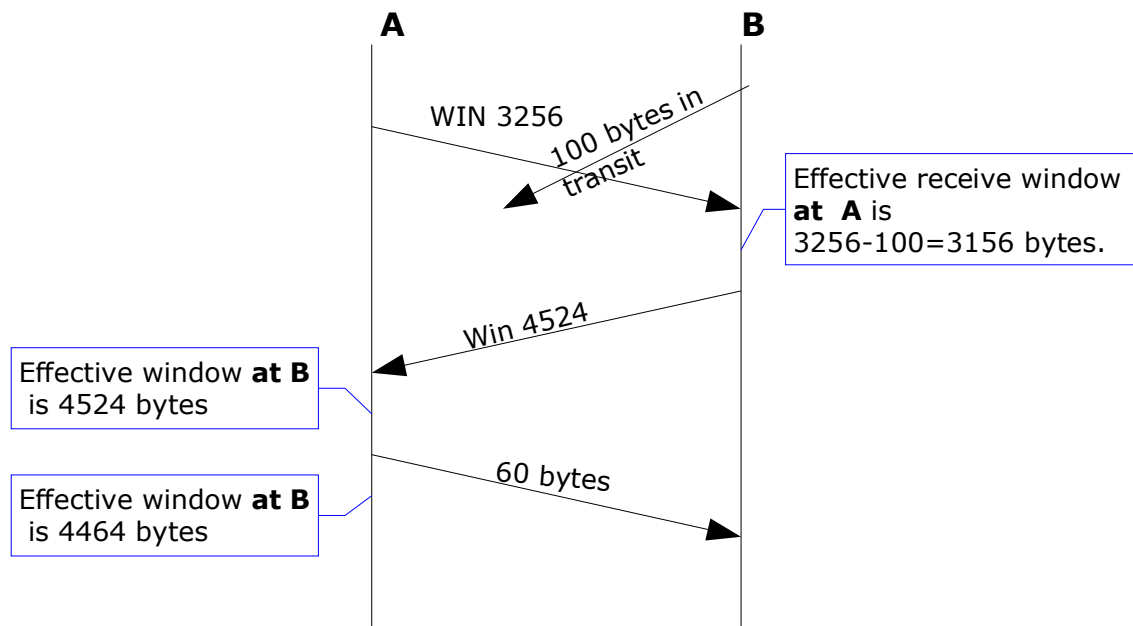
MSL is the maximum time a TCP segment is expected to live, or stay in the network. The original TCP specification, **RFC 793**, defines this as 2 minutes, but implementations are free to make reasonable engineering choices in this regard. When a TCP starts, say for example after a “crash”, it is supposed to wait MSL period before assigning any sequence numbers so that segments from a previous incarnation of the TCP will not be confused with segments from the current session.

### *Maximum Segment Size (MSS)*

The MSS is a TCP option that is exchanged with a SYN segment. It is an advertisement from the TCP to the other side about the maximum size of a TCP segment it is prepared to receive. **RFC 1122** (Host Requirements) specifies a default value of 536 bytes if not set at connection establishment stage.

### *TCP Window size*

TCP header contains a 16-bit window size parameter. This is the size of the currently available receive buffer size. For example, if the Window size in a TCP header is 3256 bytes, that means that the receive buffer has space for 3256 bytes. The *effective* window is 3256 minus what is in transit towards this host.



The window size is a *flow control mechanism* by the *receiver*. It makes the sender send only as many bytes as the receiver is prepared to accept, thereby not overwhelming the receiver.