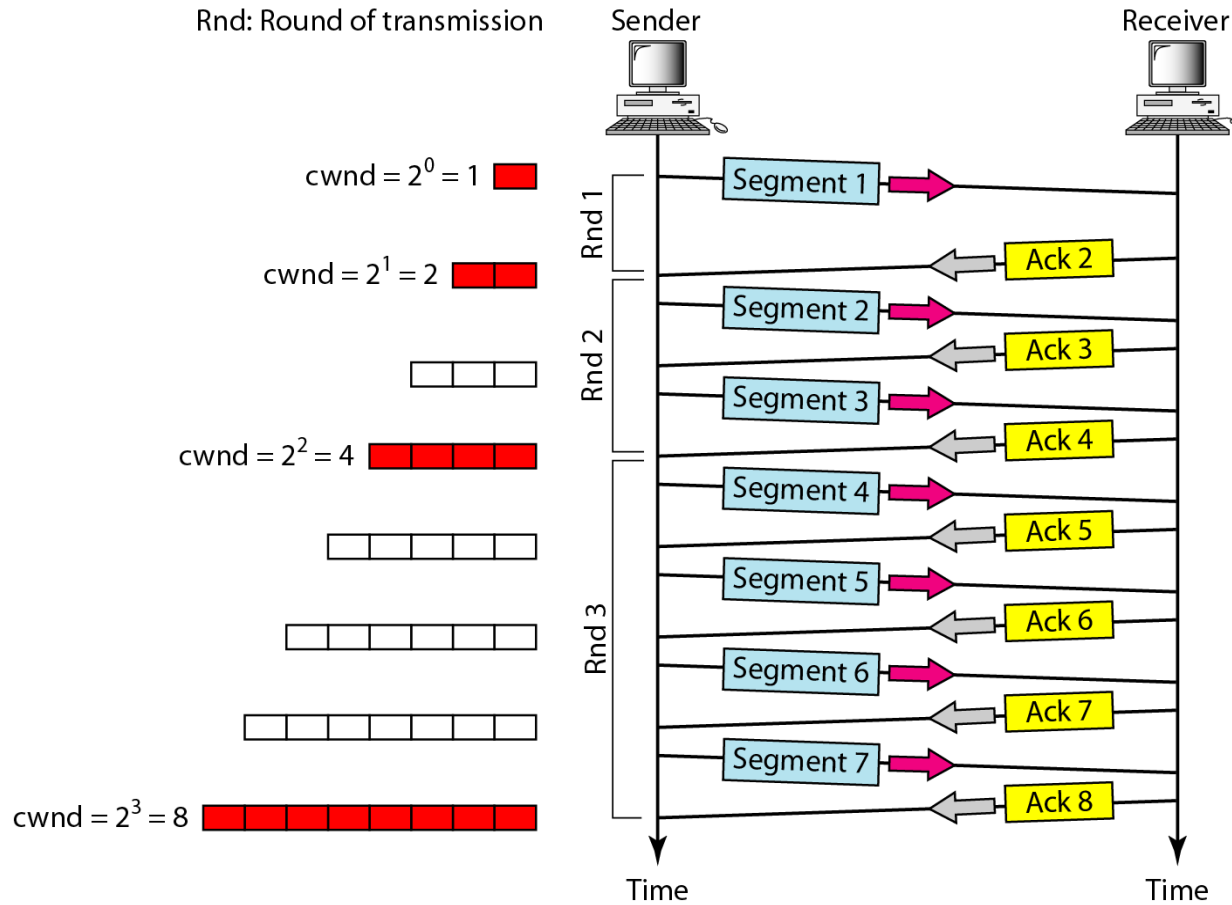


Congestion Control in TCP

CONGESTION CONTROL IN TCP

To better understand the concept of congestion control, let us give an example: congestion control in TCP.

Figure-1 *Slow start, exponential increase*

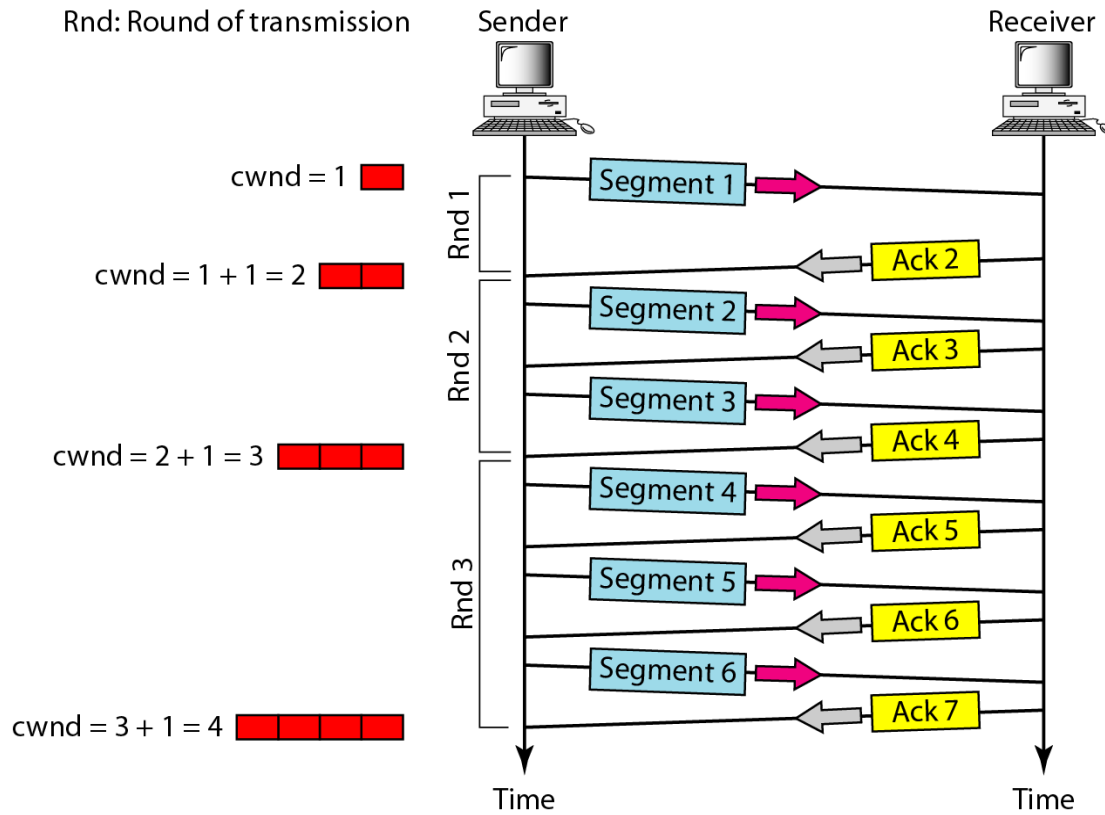




Note

In the slow-start algorithm, the size of the congestion window increases exponentially until it reaches a threshold.

Figure-2 *Congestion avoidance, additive increase*





Note

**In the congestion avoidance algorithm,
the size of the congestion window
increases additively until
congestion is detected.**



Note

An implementation reacts to congestion detection in one of the following ways:

- ❑ If detection is by time-out, a new slow start phase starts.**
 - ❑ If detection is by three ACKs, a new congestion avoidance phase starts.**
-

Figure-3 *TCP congestion policy summary*

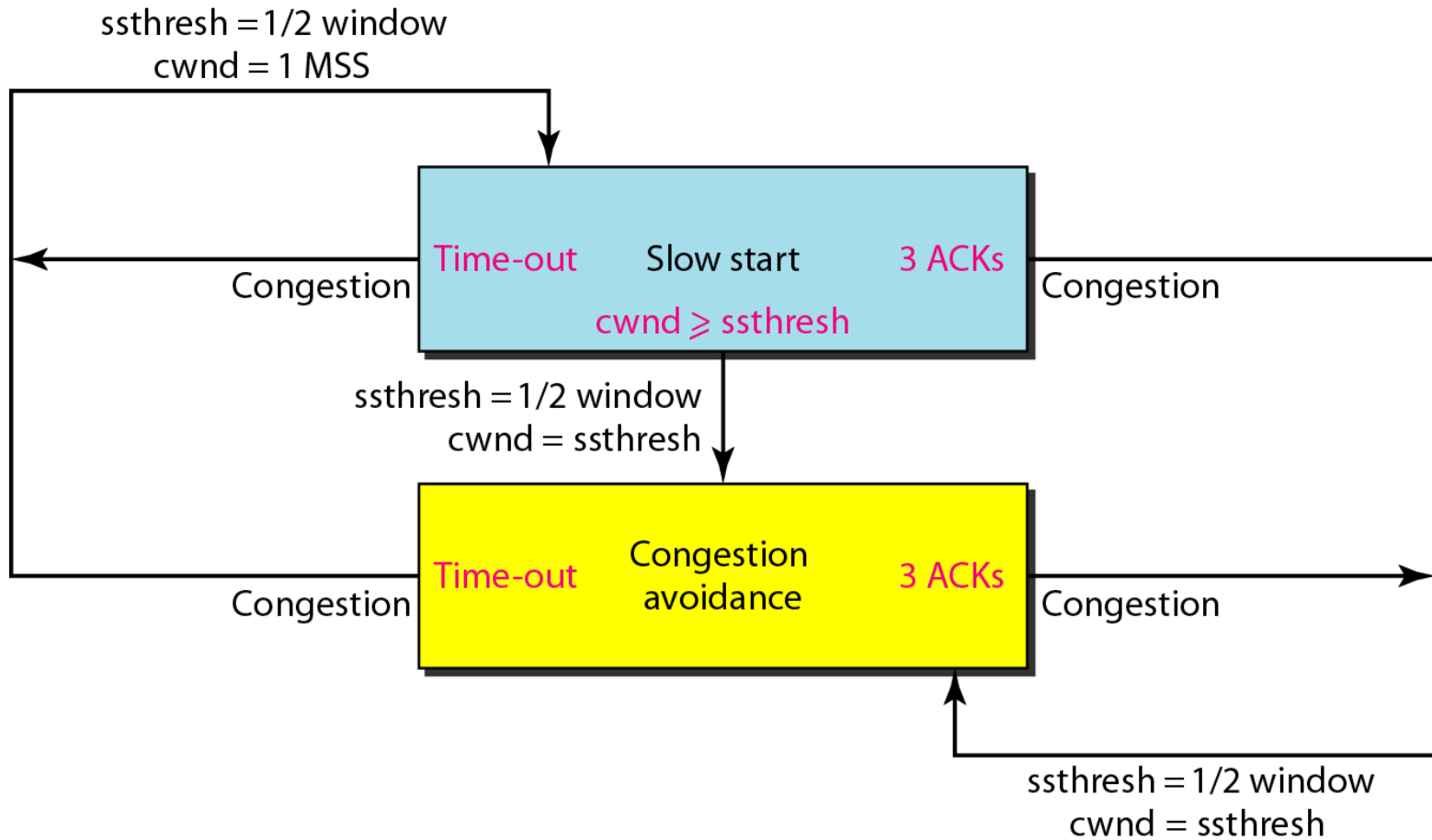
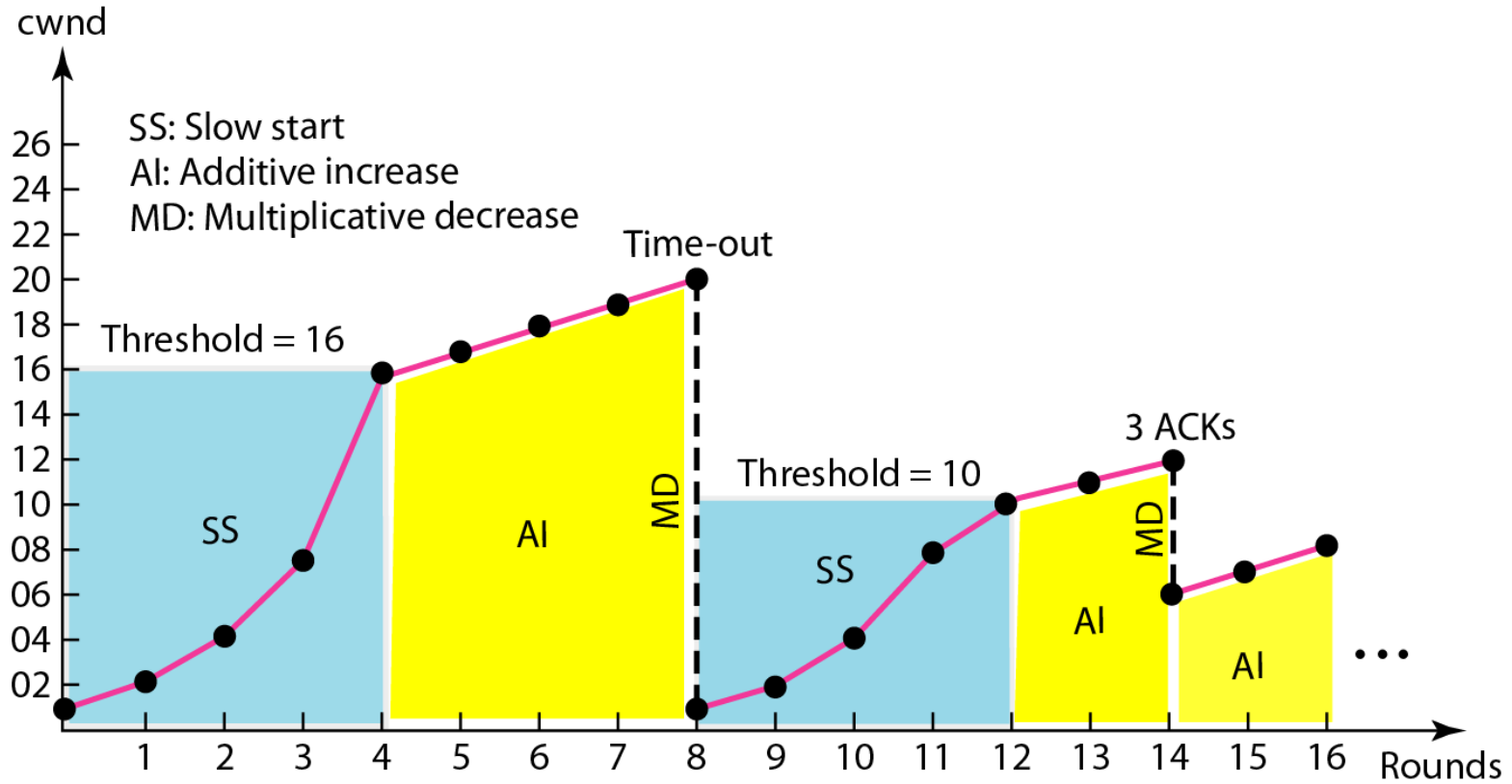


Figure-4 *Congestion example*



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