Computer Networks TCP

1 TCP congestion window

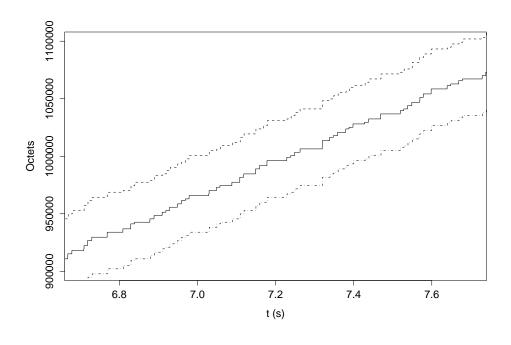


Figure 1:

- 1. These 3 lines represent the ACK progress, the SEQ progess and SEQ+WIN progress of a TCP transfer. Which is which?
- 2. Draw the congestion window at time 7s, draw the RTT at the same instant.
- 3. What is the throughput?

2 Detailed TCP behavior

We consider the TCP sequence represented in figure 2.

1. Complete this sequence assuming that host B does not send any data

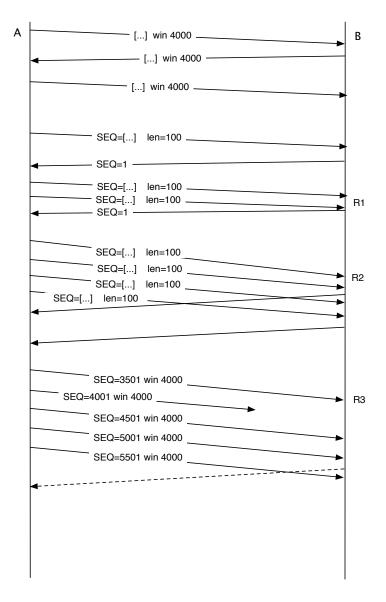


Figure 2:

- 2. Why does B send only one ACK at R1?
- 3. What would occur if ACK at R2 is lost?
- 4. What happens after R3 (ACKs are no more represented after this point)?
 - (a) With fast retransmit
 - (b) Without?