

B: 4444 A: 99 f) 8000 bytes $A \rightarrow B$ $\text{cwnd} = 1 \text{ MSS}$ $B^R = 20 \text{ MSS}$ $\text{store} = 8 \text{ MSS}$
 $\text{MTU} = 1500 \rightarrow \text{MSS} = 1460$ $\text{DA: } 1:1460$



$\min(1, 20) = 1$ $\text{cwnd} = 1$ $W^R = 20$

ETH | IP | TCP
 14 20 20+x = 54+x

$\min(\text{cwnd}, W^R)$ $\text{cwnd} = 2$ $W^R = 20$

ETH | IP | TCP | DATAS
 14 20 20 1460

4

20

1 0 64 B: 4444 > A: 99: S 0:0 (0) win 20 MSS <MSS 1460>
 2 0 64 A > B: S 0:0 (0) ack 1 win 20 <MSS 1460>
 3 RTT 64 B > A: ack 1 win 20
 4 RTT 1514 A > B: . 1:1461 (1460) ack 1 win 20
 5 2RTT 64 B > A: ack 1461 win 20
 6 " 1514 A > B: . 1461: 2921 (1460) ack 1 win 20
 7 " 1514 A > B: . 2921: 4381 (1460) " "
 8 3RTT 64 B > A: ack 2921 win 20
 9 " 64 B > A: ack 4381 " "
 10 " 1514 A > B: . 4381: 5841 (1460) ack 1 win 20
 11 " 1514 " " 5841: 7301 (1460) " "
 12 " 754 " " 7301: 8001 (700) " "
 13 4RTT 64 B > A: ack 5841 win 20
 14 " " " " ack 7301 " "
 15 " " " " ack 8001 " "
 16 " " " A > B: F 8001: 8001 (0) ack 1 win 20
 17 5RTT " B > A: F 1:1 (0) ack 8002 win 20
 18 " " " A > B: ack 2 win 20