

Q14: Host A and B are directly connected with a 100Mbps link. There is one TCP connection between the two hosts, and Host A is sending to Host B an enormous file over this connection. Host A can send its application data into its TCP socket at a rate as high as 120 Mbps, but Host B can read out of its TCP receive buffer at a maximum rate of 50Mbps. Consider the effect of TCP flow control.

What is the effective sending rate of A to B initially?

The effective sending rate is capped at 50Mbps.

What is the approximate rate at which the receiver buffer fills up

Approximately 50Mbps.

What happens when the receiver buffer is full?

The receiver sends a window size of 0 to the sender.

What is the overall effect of TCP flow control on the sender, Host A?

TCP flow control sets A's sending rate to 50Mbps.

Flow control ensures sender A's packets aren't loss from the receiver's buffer overflow.

https://youtu.be/zM4z_ugyjQ4