Lecture 22 (4/9) Self-Test

Due Apr 23 at 5pm

Points 1

Questions 10

Available Apr 9 at 5pm - Jun 1 at 11:59pm about 2 months

Time Limit None

Score for this survey: **1** out of 1 Submitted Apr 16 at 1:23pm This attempt took 2 minutes.

Question 1

Consider host A communicating with host B over a network path that has an RTT of 100ms and a bandwidth of 100Gbps. Assume an MSS of 125bytes. According to the TCP equation, what is the drop rate required to achieve a rate of 100Gbps?

1.5 x 10^-14

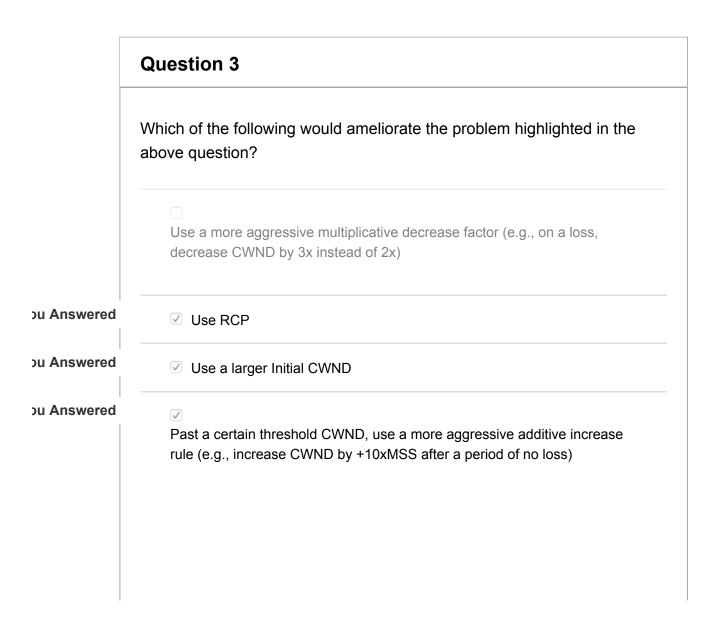
ou Answered

- 1.5 x 10^-10
- 1.5 x 10^-7
- 1.5 x 10^-4

1.5 x 10^-14

Question 2

| | Continuing with the above question, roughly how many hours would pass between packet drops? |
|-------------|---|
| | O 1.85 |
| ou Answered | 18.5 |
| | O 185 |
| | |
| | 185 |
| | |



Use RCP

Past a certain threshold CWND, use a more aggressive additive increase rule ...

Question 4

Consider two TCP connections A and B, with the following properties:

- Connection A: MSS = 1000bytes, RTT = 100msec, drop probability = 1%
- Connection B: MSS = 2000bytes, RTT = 500msec, drop probability = 4%

What is the ratio of A's throughput to B's?

25

5

ou Answered

1

1/5

5

Question 5

Using Fair Queuing at routers eliminates the need for dynamic rate adjustment at senders.



| | Question 6 |
|-------------|---|
| | Max-min fairness means that all flows get an equal bandwidth allocation |
| ou Answered | • True |
| | ○ False |
| | |
| | False |
| | |

| | Question 7 |
|-------------|------------------------|
| | The use of ECN can: |
| ou Answered | ✓ Improve fairness |
| ou Answered | ✓ Reduce queuing delay |
| ou Answered | ✓ Increase packet loss |
| | Reduce packet loss |



ou Answered

• True

False

True.

Question 9

With RCP, hosts can no longer cheat (to obtain more than their fair share of bandwidth)

ou Answered

True

False

False. RCP just tells the sender what rate it should send at. It doesn't enforce that senders only send at that rate.

| | Question 10 |
|-------------|--|
| | With TCP, short flows can suffer unduly long transfer times. Using ECN would fix this. |
| ou Answered | True |
| | ○ False |
| | |
| | False. |

Survey Score: 1 out of 1