MadeEasy Subject Test 2019: Computer Networks - Congestion Control

asked in **Computer Networks** Dec 1, 2018

edited Mar 4, 2019 by **akash.dinkar12**

758 views

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Consider an instance of TCP's Additive Increase Multiplicative Decrease (AIMD) algorithm where the window size at the start of slow start phase is 1 MSS and the threshold at the start is 1st transmission is 16 MSS. Assume TCP use over a lossy link i.e., timeout occur after transmission of 7th packet . What is the congestion window size at the end of 14 RTT (in MSS)?

made-easy-test-series computer-networks congestion-control

Sandy Sharma

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1 Answer

2

At:

t=1,⇒1MSS

t=2,⇒2MSS

t=3,⇒4MSS

t=4,⇒8MSS

t=5,⇒16MSS

t=6,⇒17MSS (Additive increase)

t=7,⇒18MSS (fails)

t=9,⇒2MSS

t=10,⇒4MSS

t=11,⇒8MSS

t=12,⇒9MSS

t=13,⇒10MSS

t=14,⇒11MSS

So, **at the end of** 14th **sucessful transmission** ,

The the congestion window size will be (11+1)=12MSS.

answered Dec 1, 2018

balchandar reddy san

4 Comments

Sandy Sharma commented Dec 1, 2018

As per question, Timeout occured at 7th packet not 7th transmission.

1

shashank8141 commented Dec 9, 2018

why did you add 1 at the end? 11+1?

0

balchandar reddy san commented Dec 19, 2018

at the end of the 14th transmission, window size will increase by 1 for 15th transmission.

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King Suleiman commented Sep 7, 2019

@akash.dinkar12 @balchandar reddy san @Sandy Sharma

sir, timeout occurs after 7th pkt na?

at rtt=4, we are sending 8 pkts right? then how is the solution correct?

should the quesntion say-"timeout after rtt=7?" or both things mean same?

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asked Jan 14, 2019

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shouldn't the ans be 5600? as it takes 14 RTTs to get back to full size ans given is

asked Dec 17, 2018

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#3

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asked Nov 26, 2018

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#4

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I thought 2600 cause after 34, it takes one RTT and size becomes 36 before sending

asked Jan 20, 2019