



Fairness Round Trip Time

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FRTT Issues



• Frequency and Broadcast nature of the FRTT_REQ causes high SW load on all stations just to determine that they are not the tail



Suggested Remedy



- Two types of FRTT_RESP frames
 - First type is as in the draft and is used to determine the class A delay from every station to every other station
 - Only has to be done once after topology changes
 - Second type is new and has same payload size, but the first field is
 - Tail Sequence Number



Suggested Remedy



- Upon becoming a tail station, the FRTT_RESP2 frame is transmitted to the head
 - Transmitted twice with both Class A and Class C service
- Head receives both messages and timestamps when they arrive
 - Differential delay of the messages shows the return trip delay
- A new frame is transmitted every 100ms if the station is still the tail.



Advantages



- Lower overhead compared to current draft
 - fewer stations processing messages
 - Enables lower cost boxes with lower performance / centralized processor complexes.