Very Initial Input from the IETF Transport Area

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Background

- IEEE liaisons notified IETF transport area directors about the IEEE CM work
- we organized a brief meeting with some IETF congestion control folks during the Montreal IETF last week
- not a thorough evaluation (time too short)
- but identified some initial questions
- might add some of these to “BCN action items”
Queue Buildup Signal

- is link layer queue buildup signaled to L4 transport protocols?
- if yes, how?
- if no, should it?
Rate-Based Pacing

- how does rate-based pacing at L2 interact with L4 congestion control?
- if traffic stays on a single BCN link?
- if traffic crosses multiple BCN links connected by IP routers?
Carry IP?

- is this meant to carry IP congestion-controlled traffic?
- (wasn’t clear from some of the material)
- if not, coexistence with concurrent IP congestion-controlled traffic may still need to be investigated
Reaction

• interactions if L4 congestion control and BCN react to the same congestion signal on similar timescales?
Not Only TCP

• the IETF has congestion-controlled L4 transports other than TCP
  • SCTP, TFRC, DCCP and variants, etc.
  • pseudowires and RTP
  • high-speed TCP variants are coming
• generally “TCP friendly” – but that can include slower/different congestion response than TCP
• recommend to include these in the simulation/analysis
Coordination Request

• would like to add the following clause to the PAR:

• The working group will coordinate with the Transport Area in the IETF on interactions with congestion-controlled Internet traffic, such as TCP, SCTP or DCCP.

• (heard to some agreement with this)
Next Steps

- congestion control expertise in the IETF/IRTF
  - ICCRG: Internet Congestion Control RG
  - TMRG: Transport Modeling RG
  - TSVDIR: Transport Area Directorate (not yet reformed)

- coordination will likely be anchored in one of these groups on the IETF side

- informal collaboration probably most effective, i.e., not (only) through liaison statements