

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
- <u>not</u> 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