Guidelines for Adding Congestion Notification to Protocols that Encapsulate IP

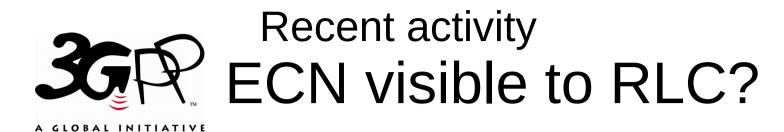
(draft-ietf-tsvwg-ecn-encap-guidelines-08)

Bob Briscoe (bobbriscoe.net)
John Kaippallimalil (Huawei)
Pat Thaler (Broadcom)

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recap draft-ietf-tsvwg-ecn-encap-guidelines-08

- Purpose of this (BCP) draft:
 - Guidelines on addition of explicit congestion notification (ECN) to protocols that encapsulate IP
 - e.g. tunnels, lower layers
- Not straightforward
 - cross-layer
 - some lower layers have very different feedback structure
 - incremental deployment
 ECN propagation requires new logic in layer-egress and hosts
 - cross-organisation
 - IEEE: https://datatracker.ietf.org/liaison/1364/
 - 3GPP: https://datatracker.ietf.org/liaison/1424/
- Split out normative updates to standards track RFCs into a fast-tracked draft (PS)
 - draft-ietf-tsvwg-rfc6040update-shim-04



- Proposal to add ECN support to 3GPP Rel15 protocols that encapsulate IP and are accessible to the Radio Link Control layer [1]
- Relative merits of using a) ECN vs. b) RAN based codec adaptation
 - Jun'17: 3GPP TSG-RAN WG2 "NR (New Radio) Ad Hoc" discussed
 - Various alternative proposals [2] to support 1) both or 2) solely 'b'
 - Considerable misunderstandings of the benefits and implementation implications
 - Decision deferred to August meeting
- Pls encourage your 3GPP delegates to understand the implications

- [1] Ericsson, "On the addition of enhanced ECN support in NR" Tdoc 3GPP TSG-RAN WG2 #98 R2-1707151
- [2] Intel, "ECN and RAN-assisted codec adaptation" Tdoc 3GPP TSG-RAN WG2 #98 R2-1707014

Recent activity ECN support in trill

- draft-ietf-trill-ecn-support (EXP)
- WGLC completed
- Will sit on hold due to normative ref to draft-ietf-ecn-encap-guidelines (BCP)
 - for when trill encapsulates a non-IP protocol

draft-ietf-tsvwg-ecn-encap-guidelines Status and Next Steps

- -09 revision edits queued
- Rewritten the section summarising relevant stuff from 6040update-shim
- Waiting for comments this week on 6040updateshim before committing the edits

- Otherwise, stable for some time
- WGLC milestone Sep 2017