

ECN++: Adding Explicit Congestion
Notification (ECN) to TCP Control Packets
draft-ietf-tcpm-generalized-ecn-02

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Pure ACKs

- Issue: ECT marking of Pure ACKs and how to respond to the congestion signal in Pure ACKs
- ECT marking: Important to prevent higher dropping of Pure ACKs in case of congestion
- Responding to congestion signal: Congestion control algorithm must respond to signals
- Bias: In case the endpoint is sending only Pure ACKs, the response to congestion will always be to reduce the sending rate
 - No possibility of non-congestion signal

Pure ACKs (II)

- Proposed (and agreed) way forward: Only ECT marking of Pure ACKs if AccECN enabled.
 - AccECN provides information about the number of packets AND the number of bytes that encountered congestion
 - In the case of a CE in a Pure ACK, the number of packets would be increased but not the number of bytes
 - This provides detailed information to the endpoint to react accordingly.

Next steps

- Update draft to reflect Pure ACKs
- Ready for WGLC