Accurate ECN

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Recent draft history
draft-ietf-tcpm-accurate-ecn-30

- **WGLC**
  - 28 → 29: 2024-06-25
    - Hiatus due to unavailability of authors
    - Update to differentiate between receive and transmit paths in TCP offload processing (Feedback received in WGLC)

- 29 → 30: 2024-07-07
  - Improve and clarify wording around the same topic

- **Other: 2024-07-11**
  - IANA renewed preliminary assignment of option numbers
    - 172 / 0xAC
    - 174 / 0xAE
AccECN implementation status

- Linux
- FreeBSD
- MacOS / iOS
- Wireshark
- Tcpdump (WIP)

- Ongoing Interop·Labs for L4S – featuring Accurate ECN in some compatibility tests

Document updates since last IETF

- Latest update (section 3.3.4) based on experience with AccECN on TSO hardware
- NICs with TSO and ECN support usually feature bitmaps for masking TCP header flags between first, middle and last segment
- Configurable only globally on the NIC, not per-flow
- Challenges when running RFC3168 ECN and AccECN simultaneously
- One implementation works around this issue by NOT falling back to RFC3168 ECN if AccECN handshake is unsuccessful.
THANK YOU