IS-IS Fast Flooding

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Goals recaps

- Improve LSPs exchange rate between two neighbors
  - Sync LSDB faster and reliably between two neighbors

- How:
  - Get rid of fixed (old) timers/parameters
  - Adapt to neighbor's speed (slower when required)
    - Flow Control
    - Congestion Control

Draft contribution (1)

- Signaling of Flooding Parameters (§ 4)
  - Flooding Parameters TLV in Hello or PSNP

- (Improved) Behavior on the receiver side
  - Send PSNP faster on P2P (§ 5.1)
    - Provides faster feedback loop to the sender

  - Packet Prioritization (§ 5.2)
    - IIH > SNP > LSP (> less critical protocols)

Draft contribution (2)

- Provides two congestion control algo (§6)
  - A sender can unilaterally choose a different algorithm to use.
  - Extensions defined in <u>Section 4</u> and <u>Section 5</u> are generic and are designed to support different sender-side algorithms.

Latest changes (00→02)

- IANA allocated code points (TLV 21)

- New sub-TLV to advertise the Receive Window

- [HTML diff](#)

Latest changes (02→03)

- The DIS plays a special role in flooding
  - Consider increasing LAN priority of fast flooders

- Added a note that draft focus on Pt-Pt Links

- New section on LSP pacing
  - Inspired/copied from RFC 9002 (QUIC Congestion Control)

- Editorial: some word/sentences replaced by word/sentences from RFC 9002

- HTML diff

Status

- Draft is stable

- Two implementations
  - Performance improvements of one implementation reported at IETF 111 interim meeting

- Ready for WG last call