IS-IS Fast Flooding

ddraft-ietf-lsr-isis-fast-flooding-03

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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 Section 4 and Section 5 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
  
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Status

• Draft is stable

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

• Ready for WG last call