Non Queue Building (NQB) Per Hop Behavior
draft-ietf-tsvwg-nqb-10

Greg White, CableLabs

Thomas Fossati, ARM

TSVWG @ IETF 113

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Status

- Draft-07 published July 28, 2021

- Draft-08 published Oct 25

- Draft-09 published Feb 11, 2022

- Draft-10 published March 4

- Milestone: Submit as Proposed Standard RFC by September 2022

Summary of Draft-10 Updates

1.   Updates in the Sender Requirements section 4.1
    a.   s/exceeds the expected path capacity/exceeds a fairly small fraction of the expected path capacity/ to fix the issue I inadvertently introduced in draft-09
    b.   s/1 Mbps is a reasonable expectation of path capacity/1 Mbps is a reasonable upper bound on instantaneous traffic rate for an NQB-marked application/ to fix the issue I inadvertently introduced in draft-09
    c.   changed text around the reference to L4S congestion control and remove reference to RFC8085 in that sentence
    d.   Expand the rationale for choosing DSCP 45, and also mention a fallback DSCP of CS5

2.   Updates in the Aggregation section 4.2
    a.   Added a forward reference to Section 4.3
    b.   More discussion on DSCP aggregation, including mention of equipment that effectively classifies on IPP bits

3.   Update in the Traffic Protection section 5.2
    a.   Added recommendation to base TP decision on actual queuing as opposed to packet arrival rate.

4.   Update in the Guidance for Very Low Rate Links section 5.3
    a.   Clarify language that describes what a "very low rate link" is

5.   Updates in legacy Wi-Fi interoperability section 8.3.1
    a.   Clarify that reconfiguring AC_VI EDCA params is intended for situation where that AC is used primarily for NQB traffic.

6.   Updates in the IANA Considerations section 10
    a.   Split out the two DSCPs into separate paragraphs
    b.   Add specific details of what should go into the Registry
    c.   Rename the DSCPs 'NQB-EDGE' and 'NQB-CORE'

Summary of Draft-10 Updates

- Fixed language around sender rate requirements
  - See §4.1 para 4
- Added more discussion of the rationale for the choice of 45
  - See §4.1 para 3 & §4.2 para 3
- Additional implication of EDCA manipulation – per JH comment
  - See §8.3.1 para 4
- Updated IANA section to call out NQB-EDGE(45) and NQB-CORE(5)
  - See §10
- Editorial nits

Next Steps

- Other comments prior to WGLC?