AVB Compliance

Michael Johas Teener

mikejt@broadcom.com

Performance

- 802.1BA should also include some performance requirements …
  - if not, then the AVnu group will have to do it
- A number of questions have been asked by implementers
  - and there are no public documents referring to performance parameters other that the most simple "system" goals
    - e.g., 2ms through 7 hops for class A
- This document has two examples

Qav shaper time measurement

- What is the granularity of "time" for the shaper?
  - e.g., what if time increments at 8kHz?
    - results in bursts every 125us …
    - for 100Mb/s links, does this increase the worst case delay? … for 1Gb/s links?
  - what if time increments at "min packet size"
    - e.g., about 5µs increments, or 200kHz for 100Mb/s
      - or about 500ns increments, or 2MHz for 1Gb/s
    - does this increase the worst case delay?

SRP delay reporting

- worst case frame delay is reported as the increase in "Accumulated Latency"
  - this is indeed a max … so a bridge could just add some ridiculous number … e.g., 1ms
  - but this is not useful
- … so what is the right limit above an actual worst case delay?
  - 125μs? 5μs? Port speed dependent?

Others?

- I will maintain a document with these questions and corresponding answers
  - or maybe Don can do it as part of his latency calculations doc …
- publically available, will report on status at every 802.1 AVB TG plenary or interim meeting