

Recent AAA2C Shaper Discussion

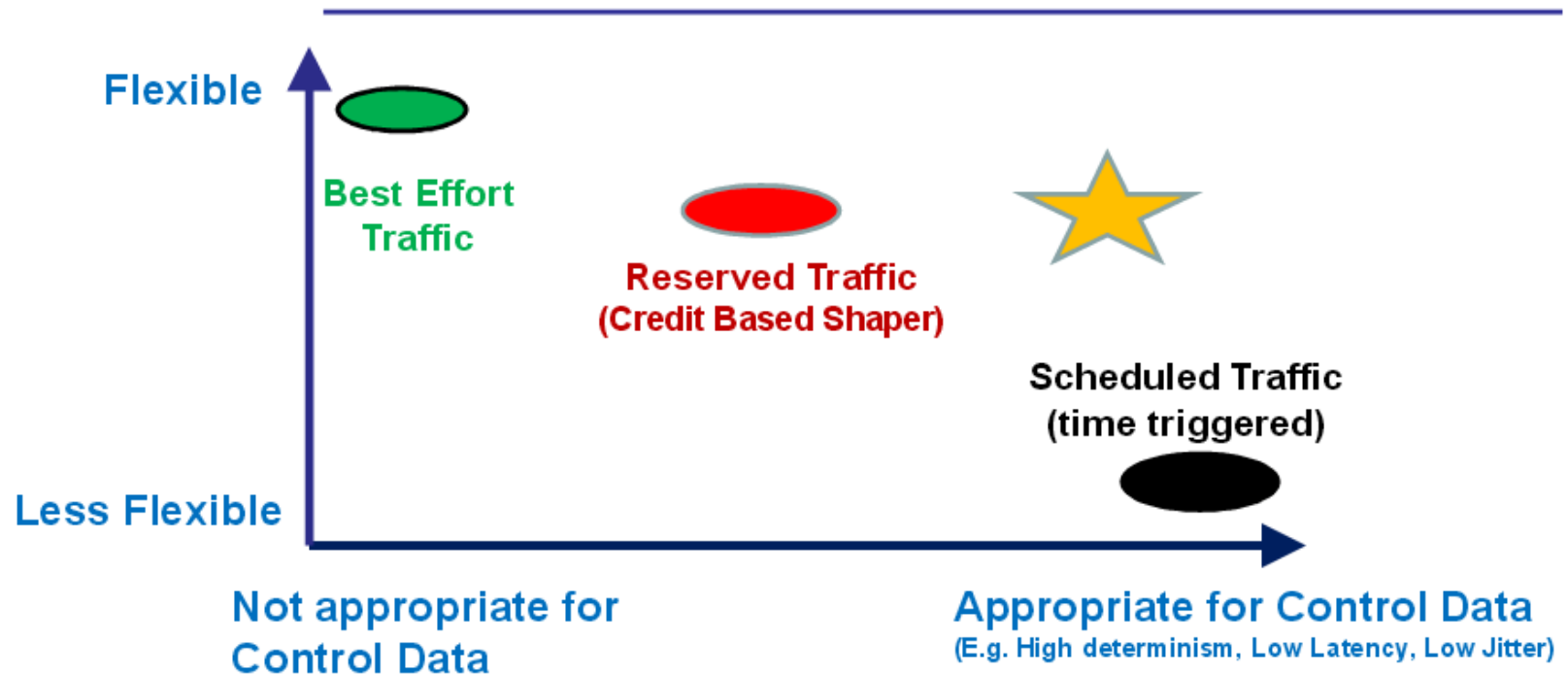
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From Geneva Presentation on AAA2C

- <http://www.ieee802.org/1/files/public/docs2013/new-tsn-jochim-aaa2c-requirements-for-control-traffic-0713-v01.pdf>

Flexible Control Traffic Class



- IEEE 802.1 TSN is currently working on proposals for additional traffic types with the desired properties: **Flexible AND Appropriate for Control Data** ★
- AAA₂C input on requirements / desired properties.

From Recent AAA2C Conference Call



Timing Characteristics of Periodic & Event based Traffic (6/6)

A comment / question received from a participant of the IEEE 802.1 TSN Plenary meeting in Geneva (07/2013) after presenting our requirements:

Assuming that some of the AAA2C requirements that have been presented are competing requirements that cannot be all be fulfilled by one single traffic class. Which of the following ones would you be more / less willing to accept?

- 1) *Latency guarantees may occasionally be violated.* (Related to Req. S4)
- 2) *Latency turns into a rather complex function of parameters like "Topology, Number of hops, etc." Tools are required for analyzing latencies.* (Related to Req. S8)
- 3) *Minimum latency is not as good as it could be.* (Related to Req. S6)
- 4) *Link utilization not as good as it could be.*

My Recommendations

- Future proposals for new shaper / scheduler shall provide
 - Clear algorithm for egress
 - Clear algorithm for worst-case latency
 - Ideally per-stream
- One example thus far...
 - Peristaltic shaper
 - <http://www.ieee802.org/1/files/public/docs2013/avb-tj-peristaltic-shaper-in-clause-8-style-0313-v1.pdf>