

AQM Characterization Guidelines Update

draft-ietf-aqm-eval-guidelines-00

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AQM Characterization Guidelines IETF' 91 Update (Summary)

- Two revisions submitted since IETF 90
- Would-be [draft-kuhn-aqm-eval-guidelines-03](#) submitted as [draft-ietf-aqm-eval-guidelines-00](#)
- The term “evaluation” in the title changed to “characterization”
- Received a couple of feedback
 - Asked for contributions (e.g. text) in AQM WG ML
 - Comments from W. Lautenschlager
 - *More comments and text is needed!!*
- Changes are mostly minor
- [Adopted as an active WG item](#) (18/09/2014)

AQM Characterization Guidelines Update (Changes)

- “Packet Scheduling” is no longer a part of AQM’s definition in the document.
- MAY discuss the feasibility of adding *packet scheduling* on top of AQM (was a MUST)
- AQM schemes MAY support ECN (was a MUST)
 - refer to [draft-ietf-aqm-recommendation-08](#)
 - [Requires general discussion!](#)
- Changes in the “evaluation metrics”
 - highlight on end-to-end metrics instead of queue-level metrics
 - hard to measure all queue-level metrics
 - End-to-end : measure only those relevant to the traffic scenario (COULD measure all instead of SHOULD)
 - Removes packet loss *pattern* as it’s conveyed by packet loss probability and intervals ([Section 2.2](#))

AQM Characterization Guidelines Update (Additions)

- Test AQM's stability under varying "congestion levels" over time (Section 7.2.4)
- Test the impact of different IWs (3,10) generated by a reasonably-sized (e.g. $10 < x < 100$ packets (MTUs?)) short-lived flow on steady-state bulk traffic (Section 4.4)
- Test the impact of unresponsive traffic (e.g. UDP CBR) on the responsive portion of the traffic load (TCP) (Section 4.3)

Remaining Discussions

- A more open way of contributing to the draft is already provided (github access upon request)
- How to measure certain metrics
 - “loss rate/interval” for bursty or non-steady-state traffic
 - flow completion time not applicable for application-limited traffic
- ...