

IETF-87 AQM BoF

<http://www.ietf.org/mail-archive/web/aqm/current/maillist.html>

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Tue., 30. July 2013
17:00, Potsdam 1 Room

Welcome to the AQM BoF

Please join the AQM discussion
aqm@ietf.org

Active Queue Management Discussion Archive

<http://www.ietf.org/mail-archive/web/aqm/current/maillist.html>

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IETF-87 AQM BoF Agenda

Topics	Speaker	Time
Introduction & Background	Chairs	17:00
Recommendations	Fred Baker (Cisco)	17:05
PIE (Proportional Integral Controller Enhanced)	Rong Pan (Cisco)	17:15
[FQ-]CoDel	Andrew McGregor (Google)	17:30
Algorithm discussion	Group	17:45
BoF Questions	Chairs	18:00
Adjourn BoF	Chairs	<18:30

Introduction and Background

- **The Active Queue Management and Packet Scheduling working group (AQM) works on algorithms for reactively managing queues in order to minimize standing queues, help control the sending rates without undue losses, minimize delays for interactive apps, and protect flows from misbehaving flows.**

PRESENTATIONS

Algorithm discussion

Similarities

- Use delay rather than occupancy
- Minimal tunable parameters
- Permit high link utilization
- Intend to permit efficient implementations

- Both are promising
 - Better than drop tail, RED
- Incremental deployment

Differences

- PIE
 - Drop before enqueue
 - Compute drop rate from departure rate and queue length
 - Decoupled from FQ/CBQ implementation
- FQ-CoDel
 - Drop at Dequeue
 - Drop based on inferring a „bad“ standing queue
 - Recent CoDel work includes emphasis on integrating FQ/SFQ aspects with the AQM

BoF Questions

- are the goals of this WG clear, well-scoped, solvable, and useful?
- should Fred's document be an initial WG item?
- should packet scheduling be a part of the charter?
- how many people might be planning to work directly on algorithms?
 - writing the specs, implementing, testing / evaluating
- should the group require evaluation criteria and requirements to be finished before adopting algorithm specifications?
- should testing methodology be something the WG should focus on early?
- should the group initially aim for a single AQM spec, or take on multiple algorithms in parallel?
 - differentiate between Core and Edge?
- should an AQM working group be formed?
- should the working group NOT be formed?

WG Naming

- AQM – good enough naming for WG?
 - Potential to invoke historic connotations
- Scheduling and Queue Management (SQM)
 - suggested by Dave Taht, updated by Gorry Fairhurst
- Active Queue Management and Packet Scheduling (AQMPS)
or
- Queue Utilization for Enhanced User Experience (QUEUE)
 - suggested by Grenville Armitage
- Queue Management (QMAN)
 - suggested by Bob Briscoe
- Queue Management And Packet Scheduling (QMAPS)
 - suggested by David Ros

**Thanks for
Your
Kind Attention
and
Participation!**