

draft-ietf-tcpm-newcwv

Gorry Fairhurst

Raffaello Secchi

Ziaul Hossain

IETF 89, London, UK

Feedback ...

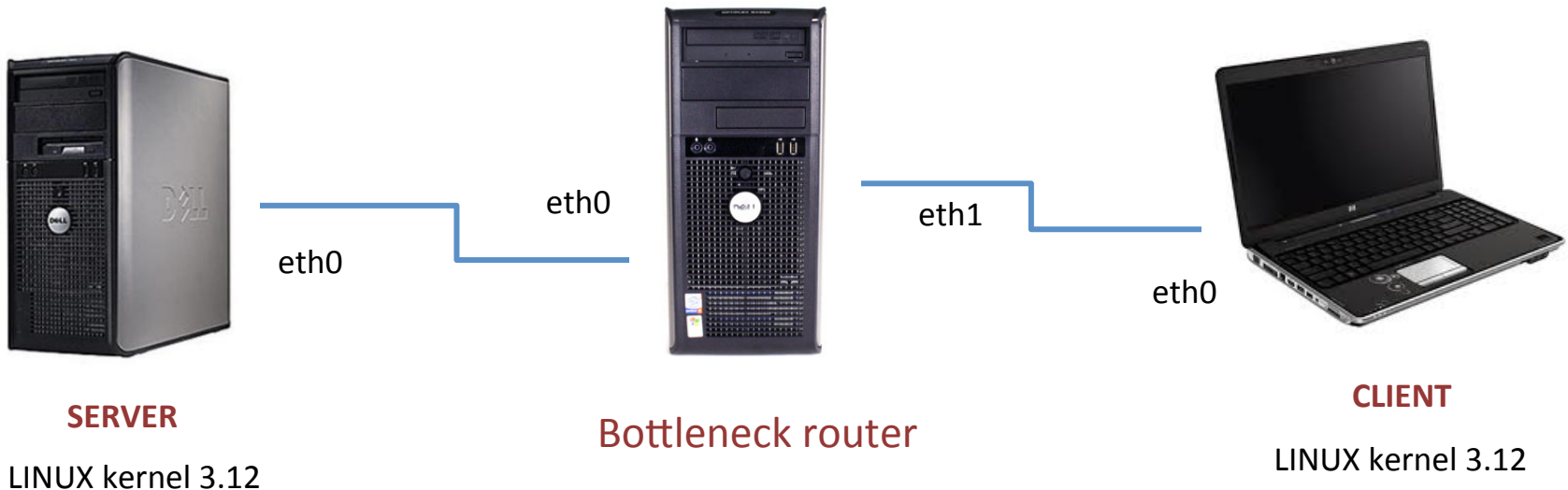
- Martin Winbjörk (before -05)
 - Experience implementing newcwv in simulator
 - Correction to cross-references, etc (detailed read)
- Mark Allman (after -05)
 - Terminology corrections (many)
 - Provide more on why the update is needed (see mailing list for response)

No major changes in Internet Draft -05

- Clarification of '*cwnd limited*' sender and its behaviour in non-validated phase
- *If* (sender is in non-validated phase)
 - If* (sender is *cwnd*-limited)
 - MAY increase *cwnd*
 - else*
 - MUST NOT increase *cwnd*
- In process of submitting to the Linux kernel maintainers
 - Formatted code according to Linux guideline and submitted to netdev mailing list
 - The code should be made CC independent (Alex)

Experiments: Setup

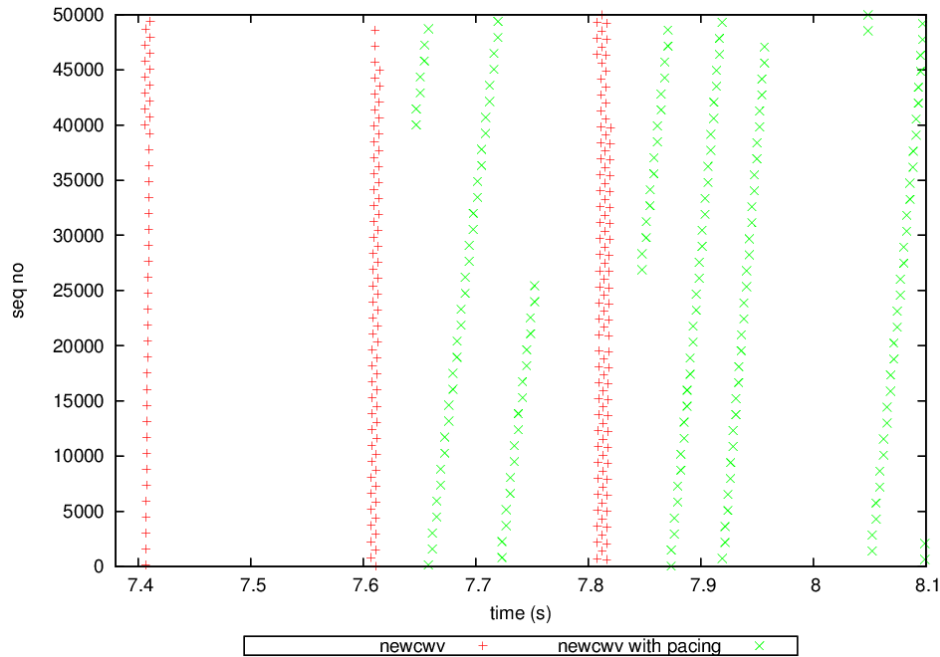
- For Pacing, used the *Fair Queuing* module with Linux 3.12
- Bottleneck 1Mbps
- Delay 200ms



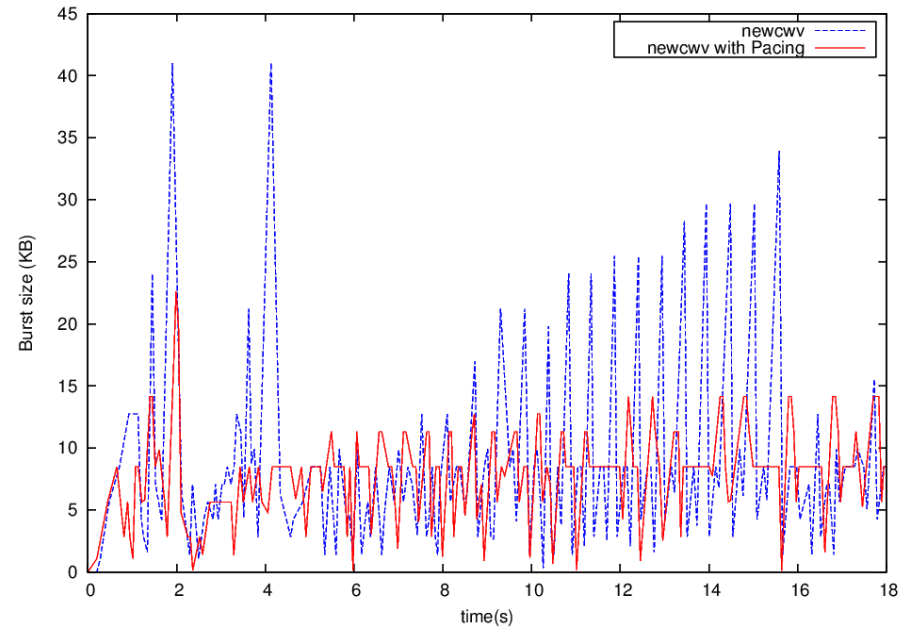
Experiments: Enabling Pacing

Pacing a burst of data over the SRTT

Pacing segments for a 200ms TCP flow



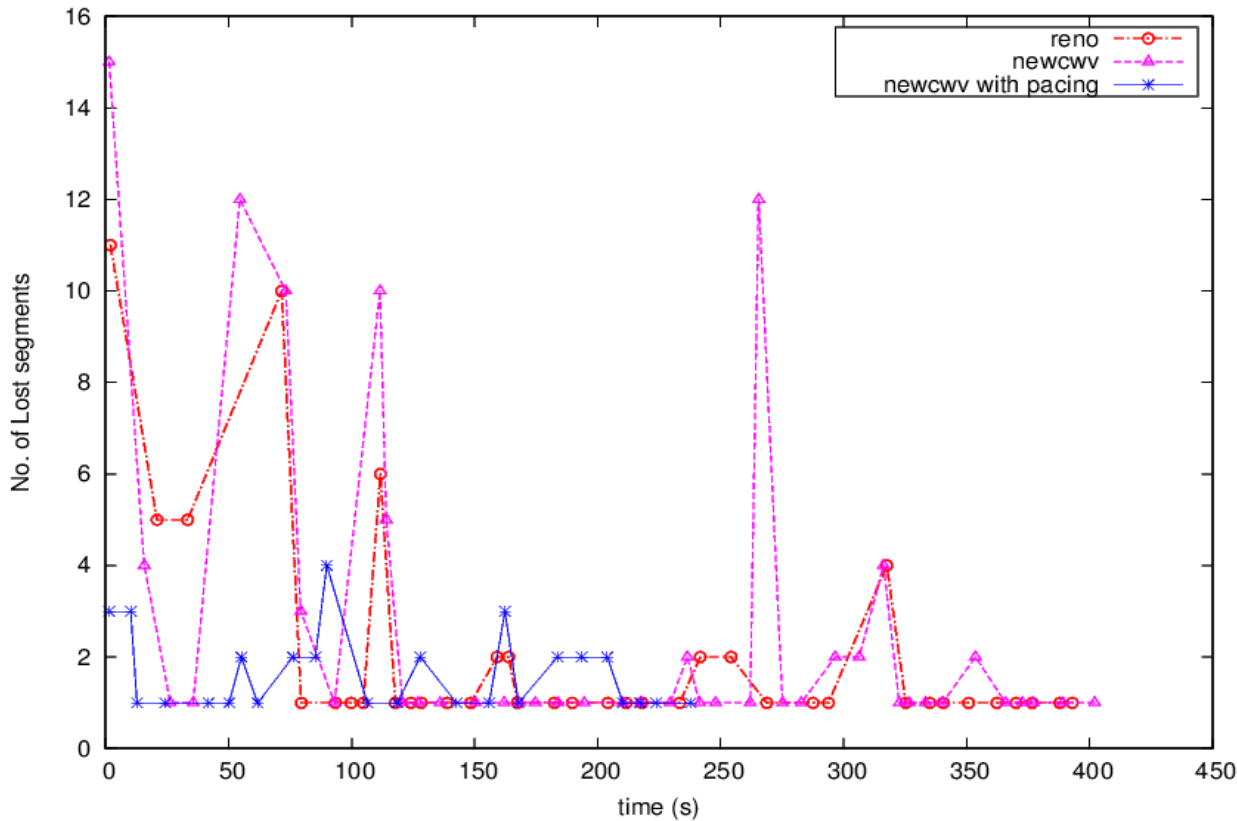
Pacing reduces burstiness of newCWW for DASH*



*Dynamic Adaptive Streaming over HTTP

DASH with newCWV & pacing

- VLC and MPEG-DASH server
- Pacing reduced losses caused by newCWV bursts
- Higher quality segments could be requested



Method	Avg. Segment rate (kbps)
NewReno	803.40
newCWV	785.40
newCWV with pacing	836.26

Next steps

- Revise draft to -06 after comments from M.Allman and any others:
 - Corrections to terminology
 - State motivations and the goals for newCWV
 - Consider reordering sections to increase readability
- We may then be ready for WGLC (at last).