Coupled Congestion Control for RTP Media

draft-ietf-rmcat-coupled-cc-00 **Safiqul Islam**, Michael Welzl, Stein Gjessing



94th IETF Meeting Yokohama, JP Nov 6 2015

What's New?

- Results based on test cases for Coupled Congestion Control with Google Congestion Control
- Prioritization tests

Coupled-CC with GCC

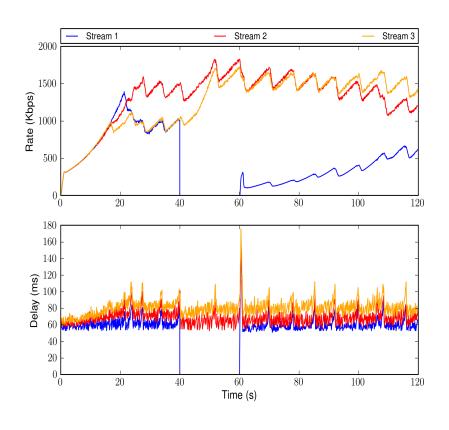
Test Cases

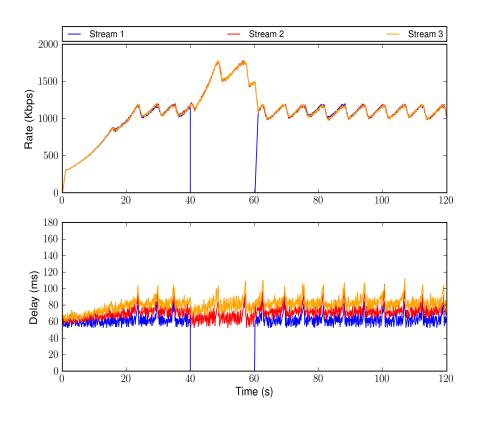
- Media pause and resume
- RMCAT flow competing with short TCP flows
- RMCAT flow(s) competing with a long TCP Flow
- Round trip time fairness
- Competing flows with same RMCAT algorithm
- Variable available capacity with multiple RMCAT flows

Media Pause and Resume

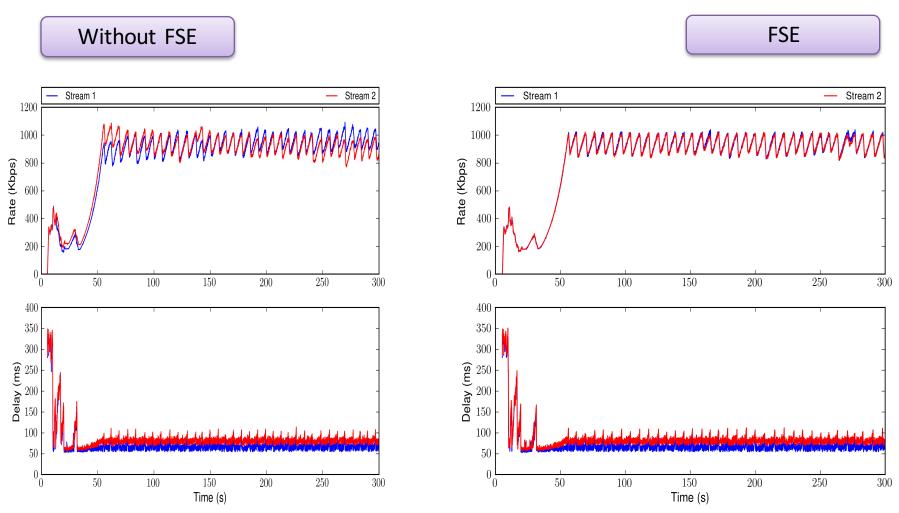
Without FSE

FSE

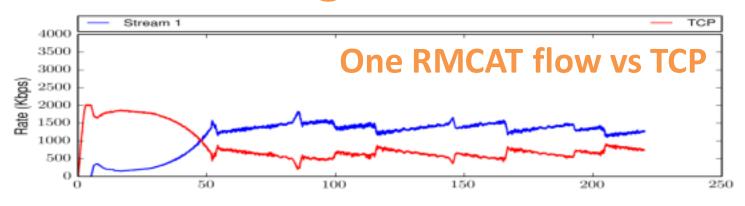


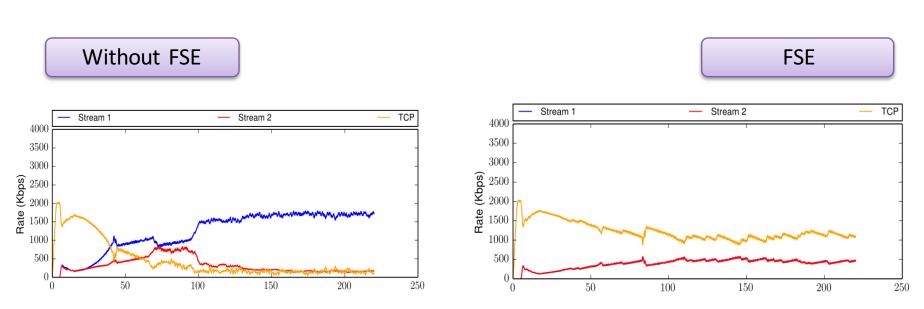


RMCAT Flows Competing with Short TCP Flows

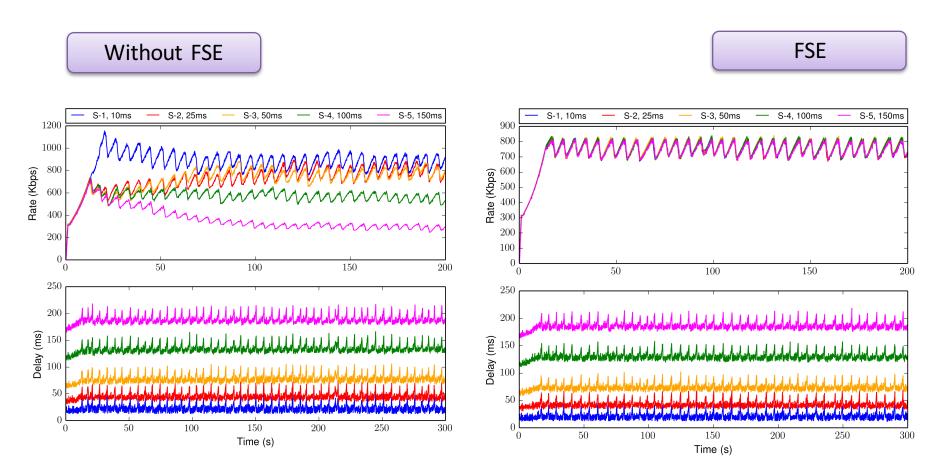


RMCAT Flow(s) Competing with a Long TCP Flow





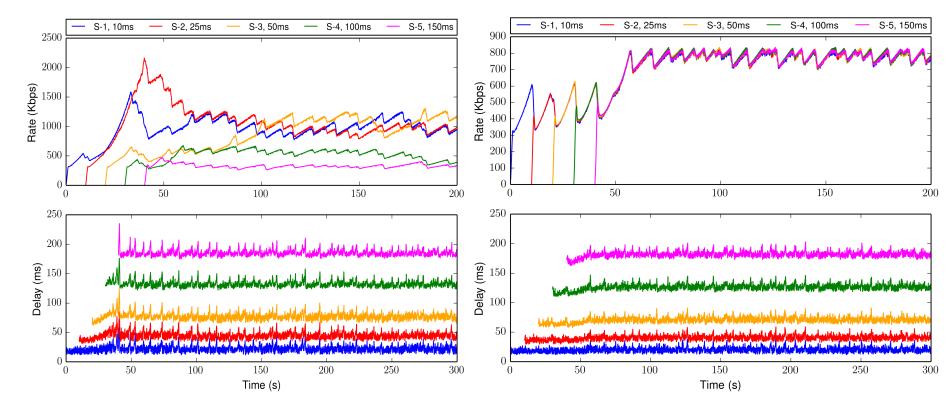
Round Trip Time Fairness (starting at the same time)



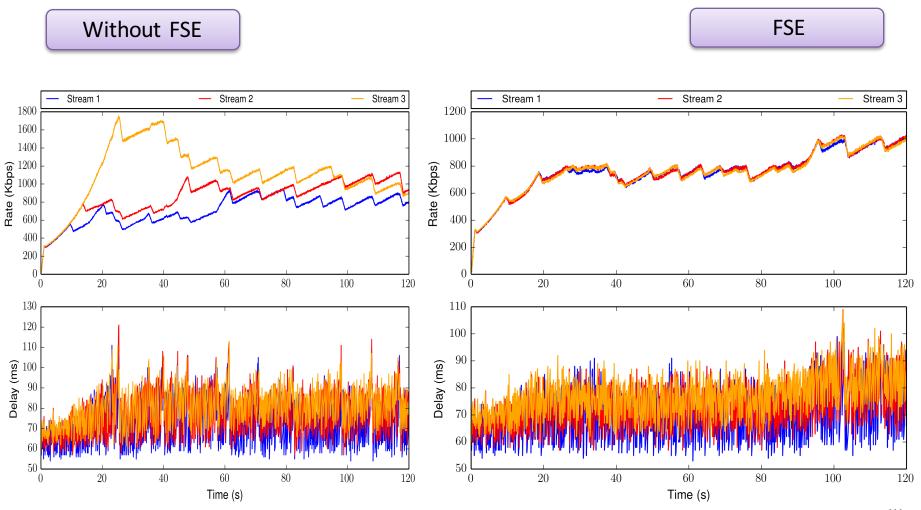
Round Trip Time Fairness

Without FSE

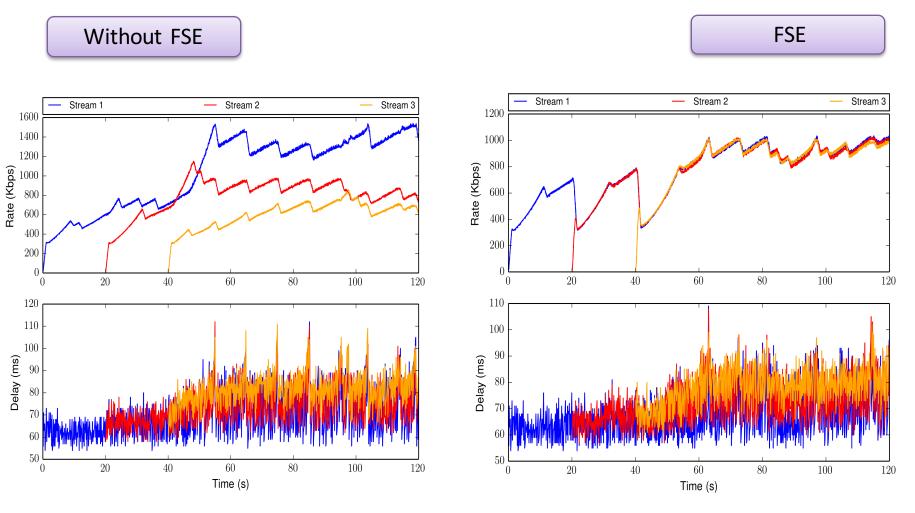
FSE



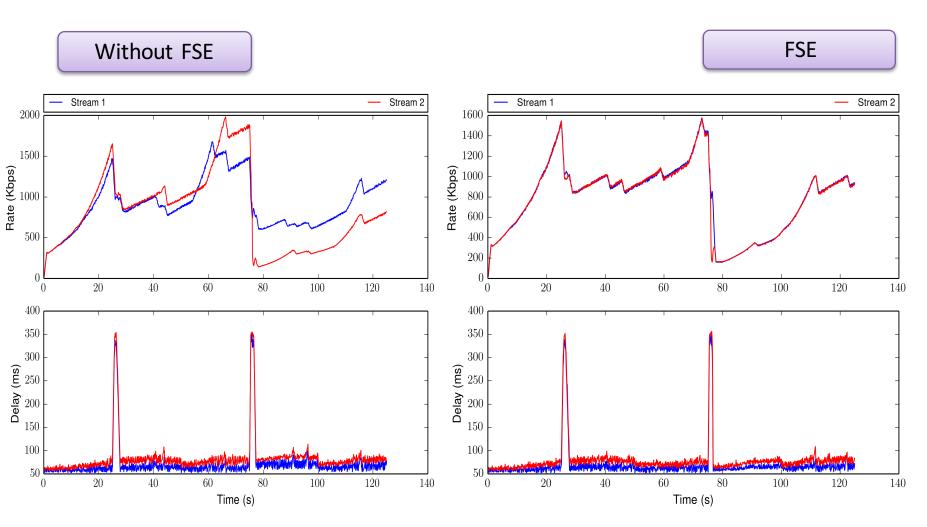
Competing flows with same RMCAT algorithm (starting at the same time)



Competing flows with same RMCAT algorithm



Variable Available Capacity with Multiple RMCAT Flows

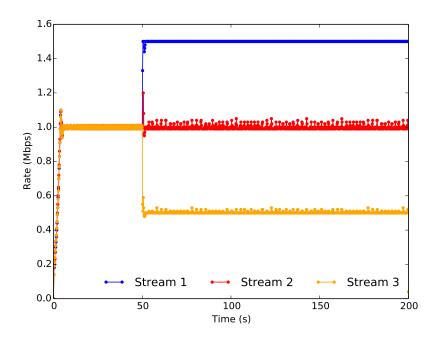


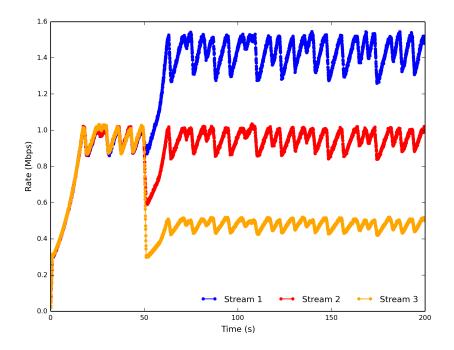
Prioritization Tests

Prioritization tests

NADA

GCC





What next?

- Update the draft
 - Incorporate Karen's comments
 - Text on how to apply Coupled Congestion Control to GCC
- Scream?

Q&A