CCWG

IETF 121

Dublin

Tuesday, November 5, 2024

09:30 - 11:30 (GMT)

Tuesday Session I, Liffey Hall 2

Mailing List: ccwg@ietf.org Zulip: zulip.ietf.org:ccwg

Meetecho: https://meetings.conf.meetecho.com/ietf121/?group=ccwg

IETF Hybrid Meetings

Session Participant Guide

Meetecho Documentation

This session is being recorded

In Person Meetecho onsite tool

Remote Meetecho video stream

IETF meeting registration and a datatracker account are required to join

Enter the queue by pressing the raise hand  button, leave with 

If onsite, use the onsite tool to enter the queue and speak via the microphone

If remote, use  to send audio, stop with 

Please state your full name before speaking and use headphones if remote

Note Well

This is a reminder of IETF policies in effect on various topics such as patents or code of conduct. It is only meant to point you in the right direction. Exceptions may apply. The IETF's patent policy and the definition of an IETF "contribution" and "participation" are set forth in BCP 79; please read it carefully.

As a reminder:

- By participating in the IETF, you agree to follow IETF processes and policies.
- If you are aware that any IETF contribution is covered by patents or patent applications that are owned or controlled by you or your sponsor, you must disclose that fact, or not participate in the discussion.
- As a participant in or attendee to any IETF activity you acknowledge that written, audio, video, and photographic records of meetings may be made public.
- Personal information that you provide to IETF will be handled in accordance with the IETF Privacy Statement.
- As a participant or attendee, you agree to work respectfully with other participants; please contact the ombudsteam (https://www.ietf.org/contact/ombudsteam/) if you have questions or concerns about this.

Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

BCP 9 (Internet Standards Process)
BCP 25 (Working Group processes)
BCP 25 (Anti-Harassment Procedures)
BCP 54 (Code of Conduct)
BCP 78 (Copyright)
BCP 79 (Patents, Participation)
https://www.ietf.org/privacy-policy/ (Privacy Policy)

Code of Conduct

IETF meetings, virtual meetings, and mailing lists are intended for professional collaboration and networking, as defined in the IETF Guidelines for Conduct (RFC 7154), the IETF Anti-Harassment Policy, and the IETF Anti-Harassment Procedures (RFC 7776). If you have any concerns about observed behavior, please talk to the Ombudsteam, who are available if you need confidentiality to raise concerns confident about harassment or other conduct in the IETF.

The IETF strives to create and maintain an environment in which people of many different backgrounds and identities are treated with dignity, decency, and respect. Those who participate in the IETF are expected to behave according to professional standards and demonstrate appropriate workplace behavior.

IETF participants must not engage in harassment while at IETF meetings, virtual meetings, social events, or on mailing lists. Harassment is unwelcome hostile or intimidating behavior—in particular, speech or behavior that is aggressive or intimidates.

If you believe you have been harassed, notice that someone else is being harassed, or have any other concerns, you are encouraged to raise your concern in confidence with one of the Ombudspersons.

Helpful Links

Agenda

https://github.com/ietf-wg-ccwg/wg-materials/blob/main/ietf121/agenda.md

Meeting Notes

https://notes.ietf.org/notes-ietf-121-ccwg

Chat

https://zulip.ietf.org/#narrow/stream/ccwg

Working Group Chairs

Reese Enghardt and Eric Kinnear

Agenda

Housekeeping Scribe Selection / Note Well / Agenda Bashing

Chair Slides, Hackathon Update (15 minutes)

Documents

- BBRv3, *Neal Cardwell* (30 minutes)
- SEARCH: A New Slow Start Algorithm for TCP and QUIC, *Mark Claypool* (20 minutes)
- Increase of the Congestion Window when the Sender is Rate-Limited, *Michael Welzl* (10 minutes)
- SCReAMv2, *Ingemar Johansson* (10 minutes)

As Time Permits

- CCA and Wi-Fi Interop, *Robert McMahon* (10 minutes)
- Congestion Control in LEO Satellite Networks, *Zeqi Lai* (10 minutes)
- CCA Testing using iperf2, *Robert McMahon* (10 minutes)

Hackathon Update

Testing congestion control table

- Simulation
- Emulation
- A/B Testing

Themes

- ns-3 simulator enhancements
- draft-ietf-tsvwg-careful-resume

Contribution Model

Continuing to use GitHub

Issues → Pull Requests → New Draft Versions

Some issues are editorial

Others are design changes

Editors have freedom to review and merge editorial [and design] changes, under Chairs' oversight, until Working Group Last Call

However, changes that impact algorithm performance and safety require additional motivation and test results

Contribution Model

Goal: Enable everyone to contribute meaningful improvements with minimal friction and resource requirements

1. Issue filed, idea proposed
2. Pull request written with precise spelling of solution
3. Test results from simulation and lab environments
4. Test results from real users on the wider internet

If you can help gather (3) and (4), please let us know, and **thank you**!

Implementors have graciously offered to run experiments to gather (4).

Focusing our Time

We’ve adopted one major algorithm, BBRv3

In terms of energy and focus, we’ve discussed also adopting non-algorithm-specific work

Upcoming Work

New and updated congestion control algorithms

- BBRv3
- SCReAMv2
- Prague
- HPCC++
- Reno

Congestion control improvements

- Rate-limited senders
- SEARCH

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