

Measurement and Analysis for Protocols

Research Group (maprg)

March 18, 2024

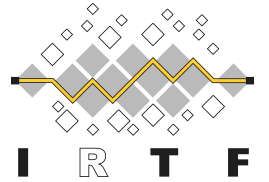
IETF119 in Brisbane

co-chairs <maprg-chairs@ietf.org>:

Mirja Kühlewind <mirja.kuehlewind@ericsson.com>

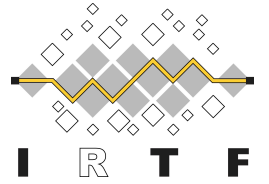
Dave Plonka <dave@plonka.us>

Note Well – Intellectual Property



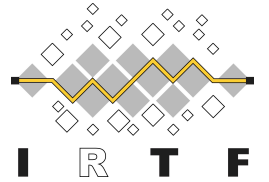
- **The IRTF follows the IETF Intellectual Property Rights (IPR) disclosure rules**
- By participating in the IRTF, you agree to follow IRTF processes and policies:
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 - The IRTF expects that you file such IPR disclosures in a timely manner – in a period measured in days or weeks, not months
 - The IRTF prefers that the most liberal licensing terms possible are made available for IRTF Stream documents – see [RFC 5743](#)
 - Definitive information is in [RFC 5378](#) (Copyright) and [RFC 8179](#) (Patents, Participation), substituting IRTF for IETF, and at <https://irtf.org/policies/ipr>

Note Well – Audio and Video Recordings



- The IRTF routinely makes recordings of online and in-person meetings, including audio, video and photographs, and publishes those recordings online
- If you participate in person and choose not to wear a red “do-not-photograph” lanyard, then you consent to appear in such recordings, and if you speak at a microphone, appear on a panel, or carry out an official duty as a member of IRTF leadership then you consent to appearing in recordings of you at that time
- If you participate online, and turn on your camera and/or microphone, then you consent to appear in such recordings

Note Well – Privacy & Code of Conduct



- As a participant in, or attendee to, any IRTF activity you acknowledge that written, audio, video, and photographic records of meetings may be made public
- Personal information that you provide to IRTF will be handled in accordance with the Privacy Policy at <https://www.ietf.org/privacy-policy/>
- 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
- See [RFC 7154](#) (Code of Conduct) and [RFC 7776](#) (Anti-Harassment Procedures), which also apply to IRTF

Goals of the IRTF



- The Internet Research Task Force (IRTF) focuses on longer term research issues related to the Internet while the parallel organisation, the IETF, focuses on shorter term issues of engineering and standards making
- **The IRTF conducts research; it is not a standards development organisation**
- While the IRTF can publish informational or experimental documents in the RFC series, its primary goal is to promote development of research collaboration and teamwork in exploring research issues related to Internet protocols, applications, architecture, and technology
- See “An IRTF Primer for IETF Participants” – [RFC 7418](#)

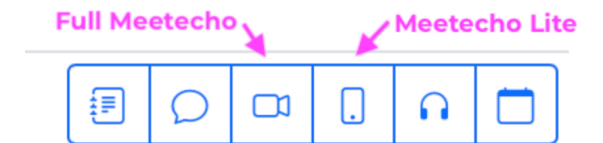
Administrativa

- Charter: <https://datatracker.ietf.org/group/maprg/charter/>
- Mailing List: maprg@irtf.org
Subscriptions: <https://www.irtf.org/mailman/listinfo/maprg>
- Today's slides: <https://datatracker.ietf.org/meeting/118/session/maprg/>
- Meetecho: <https://meetings.conf.meetecho.com/ietf118/?group=maprg>
 - Please join Meetecho (lite or full version) from the room to sign in for the bluesheets (and enter the queue)!

Meeting Tips

In-person participants

- Make sure to sign into the session using the Meetecho (usually the “Meetecho lite” client) from the Datatracker agenda
- Use Meetecho to join the mic queue
- *Keep audio and video off if not using the onsite version*



Remote participants

- Make sure your audio and video are off unless you are chairing or presenting during a session
- Use of a headset is strongly recommended

This session is being recorded.

Recently published papers at PAM'24 (March 11/12)

Congestion Control/QUIC

- [Promises and Potential of BBRv3](#)

Emilia Weyulu (Max Planck Institute for Informatics), Danesh Zeynali (Max Planck Institute for Informatics), Seifeddine Fathalli (Max Planck Institute for Informatics), Balakrishnan Chandrasekaran (VU University Amsterdam), Anja Feldmann (Max Planck Institute for Informatics)

- [QUIC Hunter: Finding QUIC Deployments and Identifying Server Libraries Across the Internet](#)

Johannes Zirngibl (Technical University of Munich), Florian Gebauer (Technical University of Munich), Patrick Sattler (Technical University of Munich), Markus Sosnowski (Technical University of Munich), Georg Carle (Technical University of Munich)

Mail

- [Spoofer Emails: An Analysis of the Issues Hindering a Better Use and Larger Deployment of DMARC](#)

Olivier Hureau (Université Grenoble Alpes, CNRS, Grenoble INP, LIG), Jan Bayer (Université Grenoble Alpes, CNRS, Grenoble INP, LIG), Andrzej Duda (Université Grenoble Alpes, CNRS, Grenoble INP, LIG), Maciej Korczyński (Université Grenoble Alpes, CNRS, Grenoble INP, LIG)

IP Addressing

- [Exploring the Discovery Process of Fresh IPv6 Prefixes: An Analysis of Scanning Behavior in Darknet and HoneyNet](#)

Liang Zhao (Sokendai), Satoru Kobayashi (Okayama University), Kensuke Fukuda (NII/Sokendai)

- [Ebb and Flow: Implications of ISP Address Dynamics](#)

Guillermo Baltra (University of Southern California), Xiao Song (University of Southern California), John Heidemann (University of Southern California / ISI), Qinge Xie (Georgia Institute of Technology), Frank Li (Georgia Institute of Technology)

Recently published papers at PAM'24 (March 11/12)

RPKI/DNS/WHOIS

- [A tale of two synergies: Uncovering RPKI practices for RTBH at IXPs](#)

Ioana Livadariu (Simula Metropolitan), Romain Fontugne (IIJ Research Laboratory), Amreesh Phokeer (Internet Society), Massimo Candela (NTT), Massimiliano Stucchi (AS58280)

- [WHOIS Right? An Analysis of WHOIS and RDAP Consistency](#)

Simon Fernandez (Univ. Grenoble Alpes, Grenoble INP, LIG), Olivier Hureau (Univ. Grenoble Alpes, Grenoble INP, LIG), Andrzej Duda (Univ. Grenoble Alpes, CNRS, Grenoble INP, LIG), Maciej Korczynski (Univ. Grenoble Alpes, CNRS, Grenoble INP, LIG)

- [Trust Issue\(r\)s: Certificate Revocation and Replacement Practices in the Wild](#)

David Cerenius (Linköping University), Martin Kaller (Linköping University), Carl Magnus Bruhner (Linköping University), Martin Arlitt (University of Calgary), Niklas Carlsson (Linköping University)

- [Swamp of Reflectors: Investigating the Ecosystem of Open DNS Resolvers](#)

Ramin Yazdani (University of Twente), Mattijs Jonker (University of Twente), Anna Sperotto (University of Twente)

BPF

- [Designing a Lightweight Network Observability agent for Cloud Applications](#)

Pravein Govindan Kannan (IBM Research), Shachee Mishra Gupta (IBM Research), Dushyant Behl (IBM Research), Eran Raichstein (IBM Research), Joel Takvorian (Red Hat Inc.)

Agenda

- 13:00** Overview and Status - *Mirja/Dave*
- 13:05** Heads-up: Performance Evaluation of PDM Implementation using eBPF in TC versus Traditional Kernel Methods - *Nalini Elkins*
- 13:10** Heads-up: Putting the Spin Bit under the Microscope - *Ike Kunze*
- 13:20** Towards Improving Outage Detection with Multiple Probing Protocols - *Manasvini Sethuraman* (remote)
- 13:30** Watching Stars in Pixels: The Interplay of Traffic Shaping and YouTube Streaming QoE over GEO Satellite Networks - *Jiamo Liu* (remote)
- 13:45** IRRedicator: Pruning IRR with RPKI-Valid BGP Insights - *Taejoong (tijay) Chung* (remote)
- 14:00** Anycast Polarization in The Wild - *ASM Rizvi* (remote)
- 14:15** Measuring L4S & NQB Latency EQects in Real World Network Testing - *Jason Livingood*
- 14:25** Out in the Open: On the Implementation of Mobile App Filtering in India - *Devashish Gosain* (remote)