Measurement and Analysis for Protocols

Research Group (maprg) Nov 10, 2022 IETF115 in London

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- 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
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- As a participant or attendee, you agree to work respectfully with other participants; please contact the ombudsteam (<u>https://www.ietf.org/contact/ombudsteam/</u>) if you have questions or concerns about this
- See <u>RFC 7154</u> (Code of Conduct) and <u>RFC 7776</u> (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" <u>RFC 7418</u>

Administrativa

- Charter: <u>https://datatracker.ietf.org/group/maprg/charter/</u>
- Mailing List: <u>maprg@irtf.org</u> Subscriptions: <u>https://www.irtf.org/mailman/listinfo/maprg</u>
- Today's slides: https://datatracker.ietf.org/meeting/115/session/maprg/
- Meetecho: https://meetings.conf.meetecho.com/ietf115/?group=maprg
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Full Meetecho

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Meetecho

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- Wear masks unless actively speaking at the microphone.

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.

Agenda

13:00 Overview & Status - Mirja & Dave

13:05 Heads-up talk: Kirin: Hitting the Internet with Millions of Distributed IPv6 Announcements - Paweł Foremski

13:10 Waiting for QUIC: On the Opportunities of Passive Measurements to Understand QUIC Deployments -Jonas Mücke

13:25 DNS Privacy with Speed? Evaluating DNS over QUIC and its Impact on Web Performance - Robin Marx

13:40 A First Look at Starlink Performance - François Michel

13:55 Illuminating Large-Scale IPv6 Scanning in the Internet - Philipp Richter

14:10 IoT Security by the Numbers - Leslie Daigle

14:25 Quo vadis IETF: is the IETF ossified? - Ignacio Castro

14:35 Where .ru? Assessing the Impact of Conflict on Russian Domain Infrastructure - Gautam Akiwate

SPACENETWORKSTESTBED: LEONETWORK GLOBAL MEASUREMENTTESTBED

Ground terminals over 3 continents









Starlink constellation with potential to extend to other mega-constellations

IMC'22 A Browser-side View of Starlink Connectivity

In nutshell:

- As of now Starlink Performance is comparable with other existing ISP (but still not better than fibre broadband)
- Starlink connection quality **changes** significantly **over location**
- Network latency can be doubled on a rainy day compared to clear sky day

Speakers for the first session

Deepak Vasisht, Assistant Professor, UIUC

Maurizio Vanotti, VP, New Markets, OneWeb

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