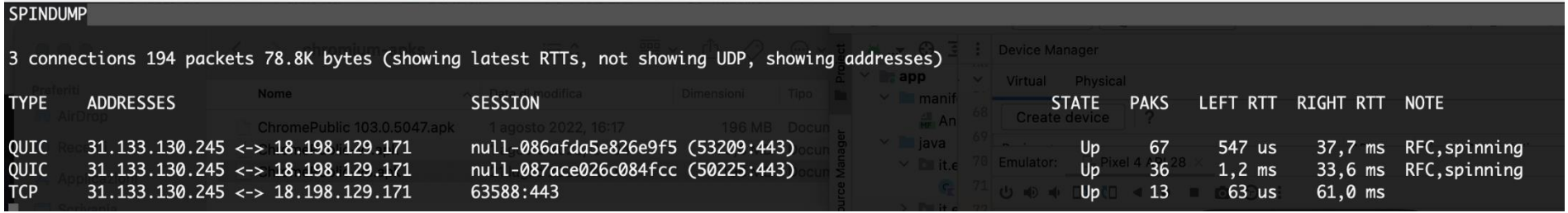
Explicit Flow Measurements IETF Hackathon

IETF 115
November 5-6, 2022
London

What got done

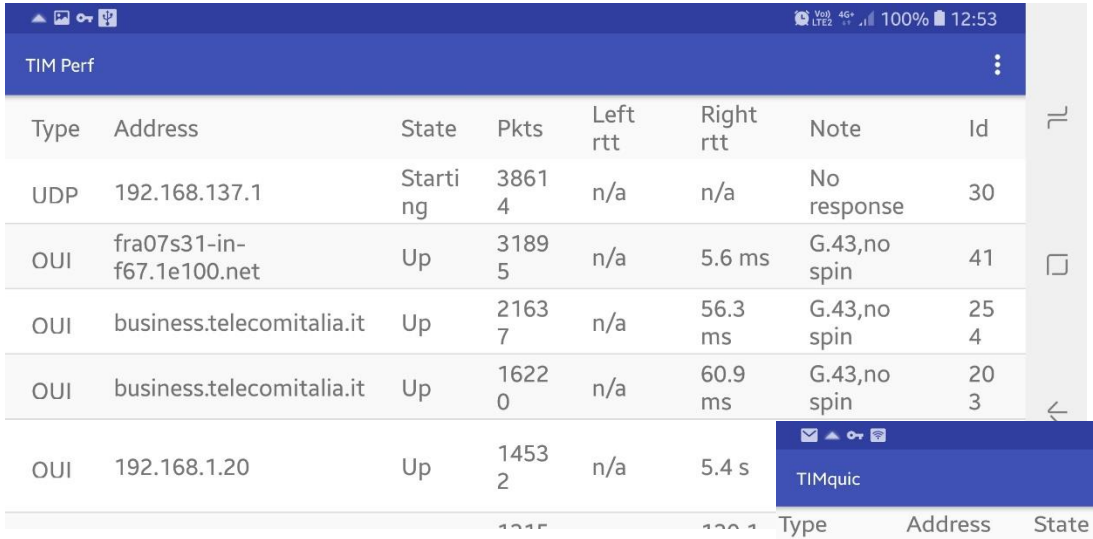
- Understand if Spinbit technique is supported on Internet
  - Implementation of Quic Spin Bit inside an open source browser, i.e. Chromium
  - Tests versus OTT Web Servers: they don't support Spinbit
  - Tests versus an Open Litespeed Web Server: successful! We got the spinbit running and delay measurements.



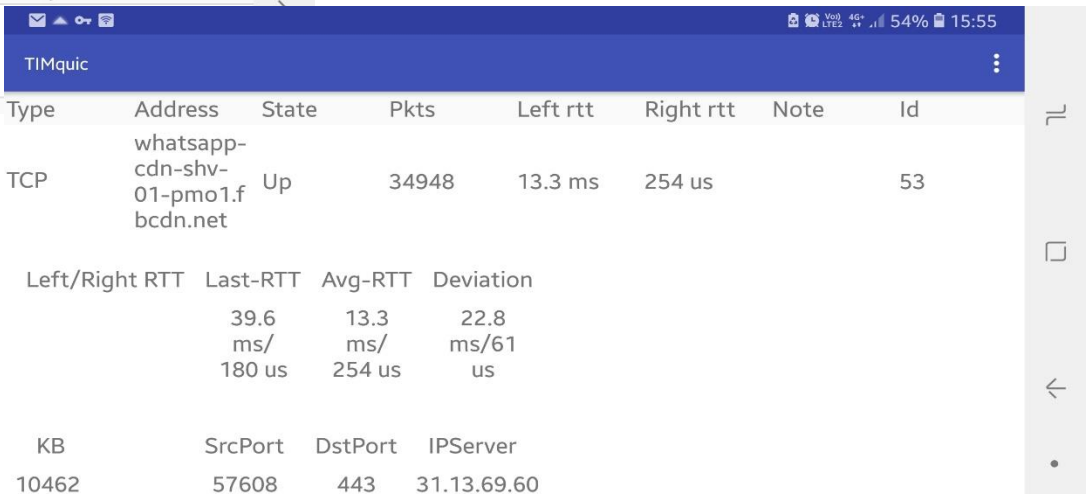
What got done

- New Delay Measurement Technique
  - We implemented a new experimental technique which require only client support.
  - It relies on internal protocol RTT evaluation and uses the same square wave mechanism of SpinBit.
  - Some preliminary tests have been done with good results.
  - Differently from other delay techniques, this does not require server reflections or interactions.

User device explicit monitoring App



Demo Screenshots



IETF References

- Drafts on this work:
  - Explicit Flow Measurements https://datatracker.ietf.org/doc/draft-ietf-ippm-explicit-flow-measurements/
  - User Devices Explicit Monitoring https://datatracker.ietf.org/doc/draft-cnbf-ippm-user-devices-explicit-monitoring

Wrap Up

Team members:

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