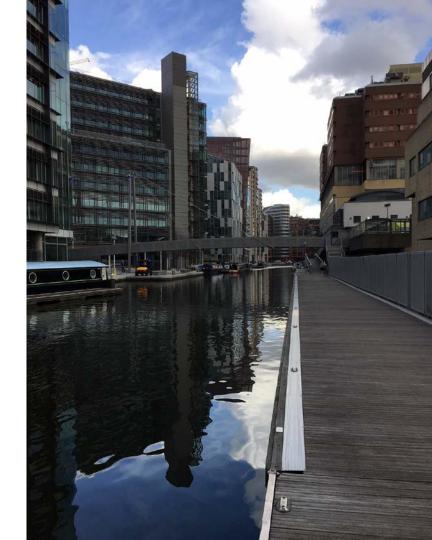# IETF Hackathon:
Network Time Security (NTS)

IETF 101

17-18 March, 2018

London

Hackathon Plan

- **Goal:**
  - Find remaining issues with the NTS draft (draft-ietf-ntp-using-nts-for-ntp-11)

- **How can we achieve it?**
  - Verify <u>interoperability</u> with two independent *proof of concept* (PoC) implementations of NTS

What got done

- Test scenario:
  - NTS client (PoC 2) against NTS server (PoC 1)

- Test results
  - (NTS key exchange) was successful
    - some small implementation bugs which were fixed

  - (NTS) time exchange revealed a misinterpretation of the NTS draft within PoC 1
  - (NTS) time exchanged verified successfully after update of PoC 1

What we learned

- Inter-op test is pretty important to find hidden issues within specifications
- We know the current draft works well

- **What we have to do now?**
  - Discussions and fine-tuning on some protocol points
  - Complete the tests

Wrap Up

Team members:

Karen O'Donoghue

First timers @ IETF/Hackathon:

Daniel Fox Franke

Richard Welty

Dieter Sibold

Martin Langer

NTP working group:

https://datatracker.ietf.org/wg/ntp

Involved documents:

draft-ietf-ntp-using-nts-for-ntp-11

RFC 7822 (NTP EF)

Git repositories:

https://github.com/dfoxfranke/nts-hackathon

https://gitlab.com/MLanger/nts

https://gitlab.com/MLanger/ntp