IETF Hackathon

- IETF 108
- July 20-24, 2020
- Online

Hackathon Plan

- NTS – NTP with security
  https://tools.ietf.org/html/draft-ietf-ntp-using-nts-for-ntp-28
- The draft has been accepted, waiting for RFC editors
- Some minor changes to the draft just before it was accepted, verify interoperability after the changes
- See if we can do something else that is useful

What got done

- More successful interoperability tests
  - All implementations talk to each other
- Some issues in different implementations identified
- Some implementations even managed to fix the issues during the hackathon
- Results https://docs.google.com/spreadsheets/d/1QjLjgVcvOdEnAS0sHWt8ZZSrbmvrQA2gaSBF3fLuCLM/view

What got done (2)

- Miroslav Lichvar has written a NTSKE testing tool which checks implementation adherence to specifications and performance testing
  https://github.com/mlichvar/ntske-test
  - Most FAILs due to implementations accepting things that a strict interpretation of the draft ought to reject
    - Some things accepted are intentional (backwards compatibility)
  - Some FAILs due to bugs, but mostly affects corner cases

What we learned

- Automatic testing tools are useful
- Interoperability still good
  - Everyone is strict in what they send, maybe a bit too liberal in what they accept
  - Some issues but this might be due to operators still filtering the NTP port (123) after denial-of-service attacks using NTP a few years ago

Wrap Up

Team members:

Christer Weinigel, Denis Reilly,

Dieter Siebold, Kai Heine,
Karen O'Donoghue,
Martin Langer, Miroslav Lichvar,

Phil Roberts, Sanjeev Gupta

Watson Ladd

First timers @ IETF/Hackathon:

https://github.com/mlichvar/chrony.git

https://gitlab.com/NTPsec/ntpsec

https://github.com/Netnod/nts-poc-python

https://gitlab.com/MLanger/nts