IETF Hackathon
LPWAN project

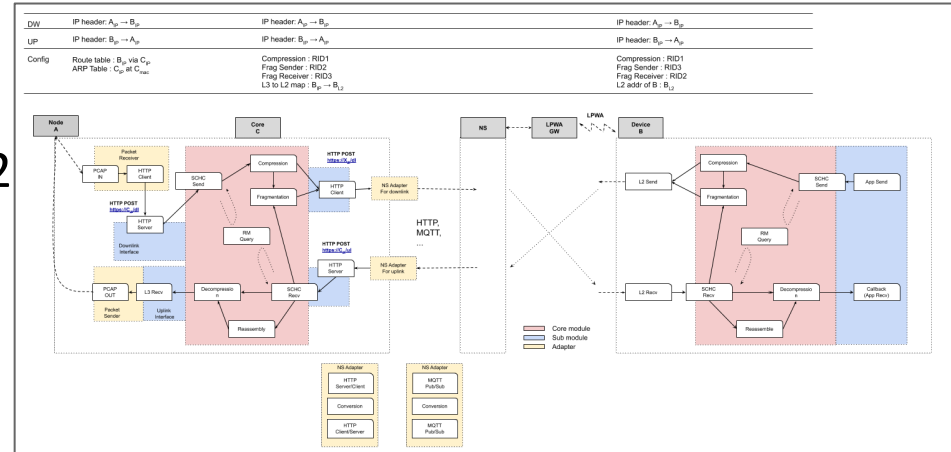**IETF 109**
November 9-13, 2020
Online

I E T F

Hackathon Plan

- Advance our open source implementation of RFC8724 (Static Context Header Compression and fragmentation)
  - Cleanup of existing code and doc
  - Develop connector to various lower layers
  - Implement draft-barthel-lpwan-oam-schc-02

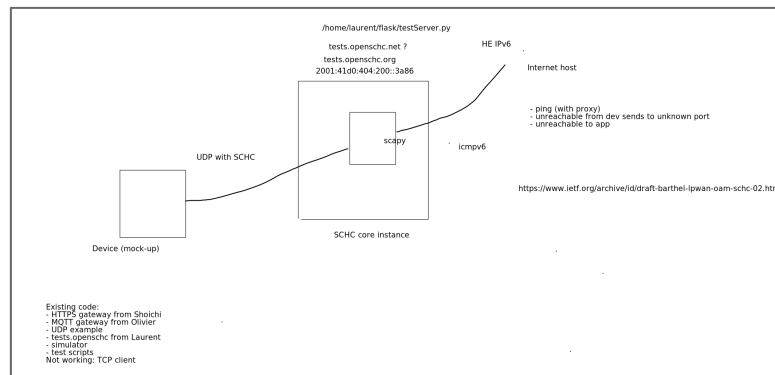- Develop infrastructure for interop testing with other implementations

What got done

- Code implementation
  - SCHC Gateway connector to Network Server (HTTPS)
  - Implemented half of draft-barthel-lpwan-oam-schc-02
  - github.com/openschc
- Doc cleanup
  - Improved User Guide
  - https://openschc.github.io/openschc

What we learned

- Gather.town worked great again!
  - Convenient audio, on/off times
  - Extensive use of whiteboard and screen sharing
  - Occasional video use, for the team feeling
  - Nice all-round Gather.town setup

/home/laurent/flask/testServer.py

tests.openschc.net ?
tests.openschc.org
2001:41d0:404:200::3a86

HE IPv6

Internet host

- ping (with proxy)
- unreachable from dev sends to unknown port
- unreachable to app

UDP with SCHC

scapy

icmpv6

https://www.ietf.org/archive/id/draft-barthel-lpwan-oam-schc-02.htm

SCHC core instance

Device (mock-up)

Existing code:
- HTTPS gateway from Shoichi
- MQTT gateway from Olivier
- UDP example
- tests.openschc from Laurent
- simulator
- test scripts
Not working: TCP client

Wrap Up

Team members (this time):

- Cédric Adjih (France)
- Dominique Barthel (France)
- Shoichi Sakane (Japan)
- Laurent Toutain (France)