IETF Hackathon

Integration of DNS over CoAP (DoC)

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Hackathon Plan

Plan:

- Continue porting DNS over CoAP (DoC, draft-ietf-core-dns-over-coap-13) for Unbound
  - Existing student code from TU Dresden
    ☞ Get this code ready to merge
  - Most of the work already done in Bangkok and Madrid

TODOs:

- ✅ Make OSCORE credentials non-constant and configurable
- ✅ Make CoAP resource path non-constant and configurable
- ⬜ Reuse TLS-PKI for DTLS
- ⬜ Find out why libcoap sends no piggybacked ACK-messages but only empty ACKs

What got done

- ✅ Make OSCORE credentials non-constant and configurable
- ✅ Make CoAP resource path non-constant and configurable
- ✅ Reuse TLS-PKI for DTLS
- ⬜ Find out why libcoap sends no piggybacked ACK-messages but only empty ACKs

What we learned

- Find the right mapping for Unbound ⇔ libcoap of TLS variable names
  - Once found, migration was rather quick

Wrap up

Team members:

- Martine S. Lenders
  (Coordination, Unbound Integration)
- Yorgos Thessalonikefs
  (Unbound liason)
- Olaf Bergmann
  (libcoap liason)
- Philipp Herold
  (not present, Unbound DoC code)

Future Steps:

- Fix remaining libcoap empty ACK issue
- Get PR merged
- Future extensions?
  - EDHOC/KUDOS for DoC
  - application/dns+cbor for DoC and DoH