

Security for Constrained RESTful Environments T2TRG, Pre-IETF118 meeting, November 03, 2023 Göran Selander

# What happened to this activity?

- Formally, as a dedicated activity, not much ...
- But the topics we identified have progressed

## Topics 1(3)

- Attacks on CoAP (was: draft-mattsson-core-coap-attacks → now: draft-ietf-core-coap-attacks)
- Amplification attacks with CoAP (was: draft-mattsson-t2trg-amplification-attacks
  → now: draft-irtf-t2trg-amplification-attacks)
- Efficient and secure tunnelling of CoAP in CoAP (was: draft-tiloca-core-oscore-capable-proxies → now: draft-ietf-core-oscore-capable-proxies)
- Security context transfer for CoAP transport indication (draft-amsuess-coretransport-indication  $\rightarrow$  ...)
- Security for non-traditional response forms (draft-bormann-core-responses  $\rightarrow$  ...)

#### Topics 2(3)

- Key limits and key update for OSCORE (was: draft-ietf-core-oscore-key-update → now: draft-ietf-core-oscore-key-update + draft-ietf-core-oscore-key-limits)
- Firmware update using CoAP group communication (SUIT/CoRE) → storyline and sketches by Marco, potential side meeting at IETF 118)
- Survey of CoAP group communication security life cycle (CoRE/ACE)
- Pub-sub for CoAP (draft-ietf-core-coap-pubsub, draft-ietf-ace-pubsub-profile now: active progress in CoRE & ACE)
- Actors in a symmetric authorization architecture (draft-ietf-ace-actors → related discussion about in ACE/LAKE about power of attorney vs enrolling "Client" and "Resource Server" roles)

## Topics 3(3)

- Authorization to wake device over radio using CoAP (draft-bormann-t2trg-sworn
  → ... )
- Trustworthy things (<a href="https://doi.org/10.1145/3488661.3494034">https://doi.org/10.1145/3488661.3494034</a>)
  - IoT device able to produce trustworthy evidence about itself using Remote Attestation Procedures
  - a new "trustworthiness" quality that allows to securely bind any information that the device exchanges with a set of trust metrics representing a snapshot of its most recent security state

#### Other topics?

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#### What next?

- Is this the right mode of operation?
  - Brainstorm new topics
  - Keep track
  - Present status