# IoT Security Hackathon

IETF 112 1-5 November 2021 Online



### Hackathon Plan

- Implement specifications developed in IETF IoT security working groups (SUIT, TEEP, CORE, TLS, ...)
- Tutorials to help new participants

## What got done

- Tutorials held. Slides and recordings are available.
- Mbed TLS code for "Connection Identifiers for DTLS 1.2" <u>updated</u> to the RFC-to-beannounced text.
- Achim Kraus and Thomas Fossati updated Wireshark code for CID.
- Wakaama (LwM2M Client for IoT device management) <u>updated</u> to support PSA Crypto API.
- Investigated Zephyr for integration of PSA Crypto API
- Identified issues with SUIT integration into TEEP
  - Ciphersuites: <a href="https://github.com/ietf-teep/teep-protocol/issues/167">https://github.com/ietf-teep/teep-protocol/issues/167</a>
  - Delete TA: <a href="https://github.com/ietf-teep/teep-protocol/issues/168">https://github.com/ietf-teep/teep-protocol/issues/168</a> and <a href="https://github.com/ietf-teep/teep-protocol/pull/169">https://github.com/ietf-teep/teep-protocol/pull/169</a>
  - Update examples: <a href="https://github.com/suit-wg/manifest-spec/pull/50">https://github.com/suit-wg/manifest-spec/pull/50</a>
  - Tool support: <a href="https://github.com/suit-wg/manifest-spec/pull/49">https://github.com/suit-wg/manifest-spec/pull/49</a>

## What we learned

- A little bit of progress on the "hacking side"
- Identified open issues with the TEEP specifications.
- Tutorials were useful (again).
- Good discussions.
- Online hackathon fatigue settles in.
- Staying focused during the hackathon is difficult with all the other meetings that happen at the same time.

## Wrap Up

#### Team members:

- Emmanuel Baccelli (Organization)
- David Brown (SUIT/Mcuboot)
- Akira Tsukamoto (TEEP)
- Garrett LoVerde (Zephyr)
- Fred Kwadwo Aazore (Newcomer)
- Kimberly Mitchell (Newcomer)
- Brendan Moran (SUIT)
- Koen Zandberg (SUIT)
- Ken Takayama (TEEP)
- Achim Kraus (CID, Wireshark)
- Kuniyasu Suzaki (TEEP)
- Kohei Isobe (TEEP)
- Lena Boeckmann (PSA Crypto, Tutorial)
- Hannes Tschofenig (CID, Wakaam, Tutorial)
- Thomas Fossati (CID, Wireshark)

#### **Tutorials:**

https://github.com/future-proofiot/SUIT-hackathons/wiki/IETF-112-SUIT-Hackathon---loT-Hacking