SUIT

IETF 104 Hackathon Report

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SUIT Hackathon Team!

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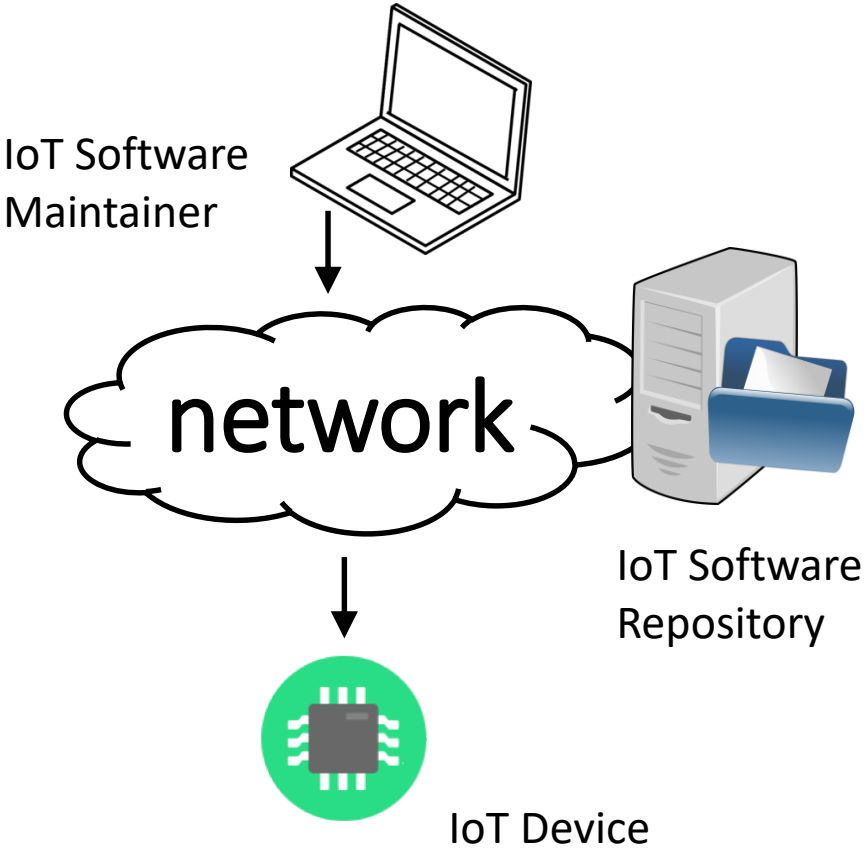
SUIT = Software updates for IoT

- Architecture & metadata for IoT firmware updates
  - also on small microcontrollers!

- @Hackathon: hands-on work with latest metadata draft
  - **cbor manifest format**
  - **draft-moran-suit-manifest-04**



What happened at the Hackathon?

- **manifest generators!**
  - 2 independent implementations (ARM, Renesas)
- **manifest parsers!**
  - 3 independent implementations (Inria/FUB, ARM, Renesas)
    - 2 of which running on small micro-controllers
- **interoperability!**
  - manifest generator (ARM) <=> parsers from Inria/FUB & Renesas
- **end-to-end workflow demo!**
  - (experimental) open source implementation based on RIOT

Microchip SAMR21
Cortex-M0+
32kB RAM, 256kB ROM

Renesas
Starter Kit
RX231
64kB RAM

What did we learn?

- The spec should define only one way to do things
- IETF hackathon = fun + useful venue!

More info?

Etherpad from Hackathon:
https://etherpad.net/p/ietf104-suit-hackathon

Manifest draft used at the Hackathon:
https://tools.ietf.org/html/draft-moran-suit-manifest-04

IETF SUIT Working Group:
https://datatracker.ietf.org/wg/suit/about/