SUIT Implementation in RIOT

Berlin 2020 Hackathon Report

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RIOT Implementation of SUIT : Starting Point

■ Implementation available in Master branch at

github.com/RIOT-OS/RIOT/tree/master/examples/suit_update
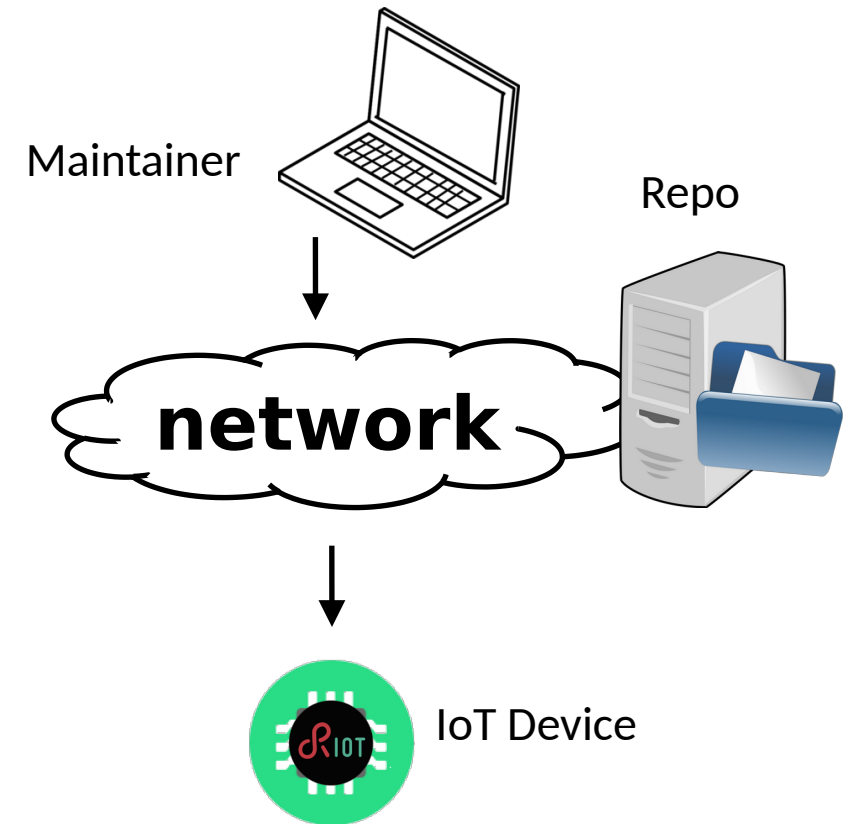
- compliant with **draft-ietf-suit-manifest-00**

- full workflow :

      1. new image/manifest generation + upload to repo

      2. transfer over CoAP,

      3. verification on IoT device running RIOT,

   4. install & boot update

(<u>Useful</u> : a VM for newbies

see github.com/future-proof-iot/RIOT/wiki/SUIT-Tutorial-and-Hackathon-Berlin-2020)

Maintainer

Repo

network

IoT Device

RIOT Implementation of SUIT : Hackathon Work

Hands-on with latest draft

draft-ietf-suit-manifest-03

- ✔ Done : manifest-03 generator integrated in RIOT build system

- ✔ Refactored code + added unittests (=> improved maintainability)

- ✔ On-going : updating manifest parser to support manifest-03

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Nordic nrf52840dk
(Board running RIOT)
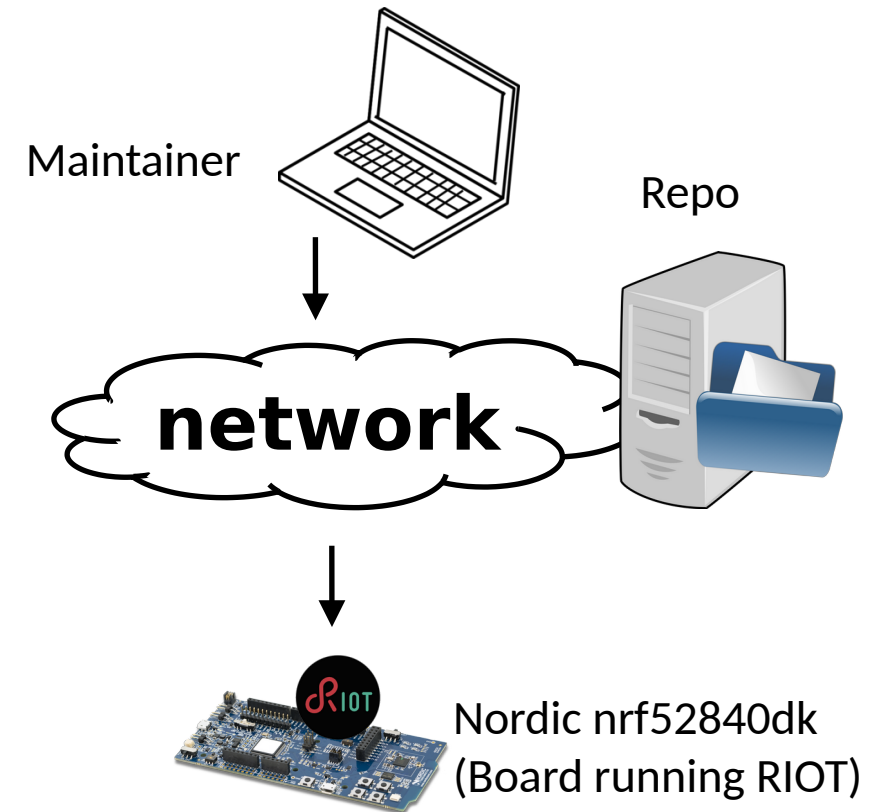
What did we learn?

➔ Detected some glitches in the manifest generator
(Brendan was informed and fixed them ;)

➔ Structure of the manifest is hard to grasp
(Add some graphical representation?)