

IoT for Locks

KIRA-digi Pilot Project 2018

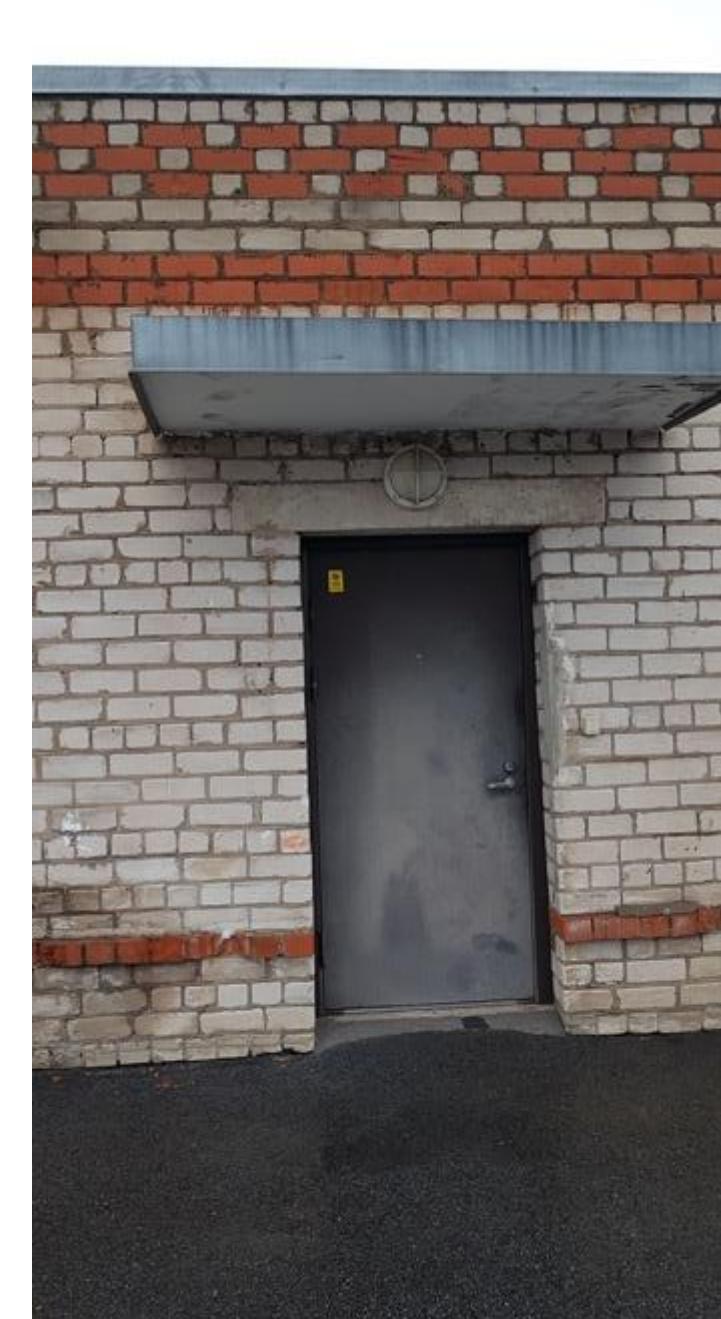
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A dense pile of various mechanical keys and locks, including padlocks and house keys, scattered across a dark surface.

Get rid of Mechanical Keys

Target Sites



- Mechanical Abloy lock cases.
- No door wiring allowed
- No mains powering available
- Metallic doors
- Simple retrofit installation
- Battery life cycle min. 2 yrs
- Has to work without a smartphone (but the option is nice to have)
- Must use virtual access media (no keys, no cards & no tags)
- Extremely cost sensitive
(target: 100€-300€/installed door)

Solution



- Lukoton *Gearlock*: battery powered mechanical lock adaptor for BLE lock controllers/keypads
- LoRaWan/BLE Keypad
- *Salesforce* back-end for access control (access rights/PIN code generation)
- 350€ -450€ 1st generation small volume price

LoRaWan (?)

The LoRaWAN specification is a Low Power, Wide Area (LPWA) networking protocol designed to wirelessly connect battery operated ‘things’ to the internet in regional, national or global networks, and targets key Internet of Things (IoT) requirements such as bi-directional communication, end-to-end security, mobility and localization services

LoRaWAN on “esineiden Internetin” pienikapasiteettinen tiedonsiirtoverkko, jolla voidaan liittää Internetiin pienikustannuksisia nappipaterilaitteita huoltovapaasti vuosiksi

User interface



- Time based PIN-code opening for sporadic users. PIN code generated by the access control systems/reservation system and sent e.g. via txt
- Lukoton app for regular users. Access control system with “virtual access cards”

And...?

- Tilojen vertaisvuokraus / yhteiskäyttö
- (Verkkokauppa)ostosten kotiinkuljetus (“last mile delivery”)
- Lyhytaikainen asuntovuokraus
- Respattomat hotellit
- Miehittämättömät jakelupisteet/konttimyyymälät

LoRa Access Control Application

