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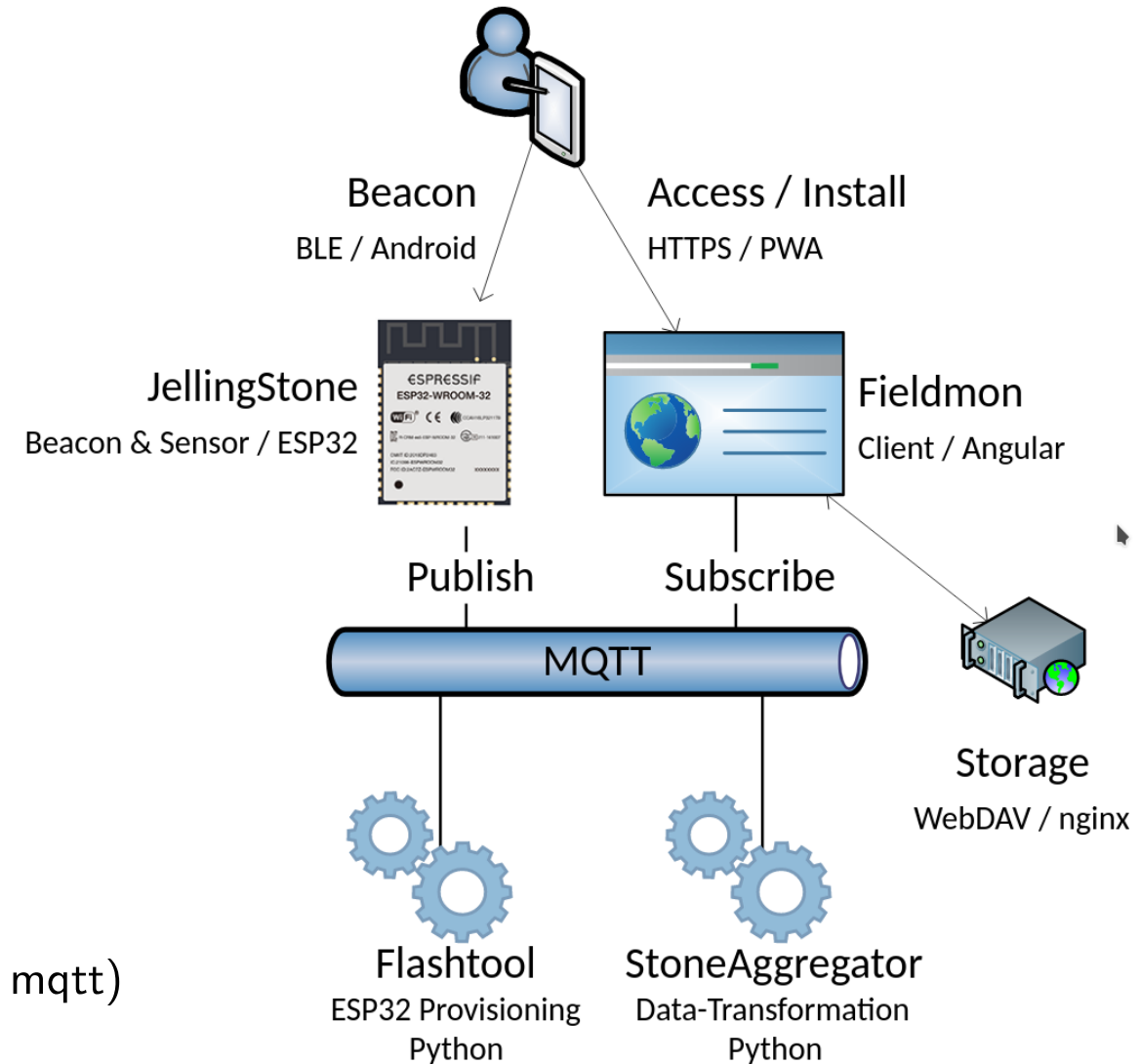
1. What is fieldtracks?

Purpose

- Tracking system for drills (relief organizations)
- Indoor and Outdoor
- Real-time and later
- Bluetooth Low Energy (BLE) based, wlan for results
- ESP32 + Smartphones

Timeline

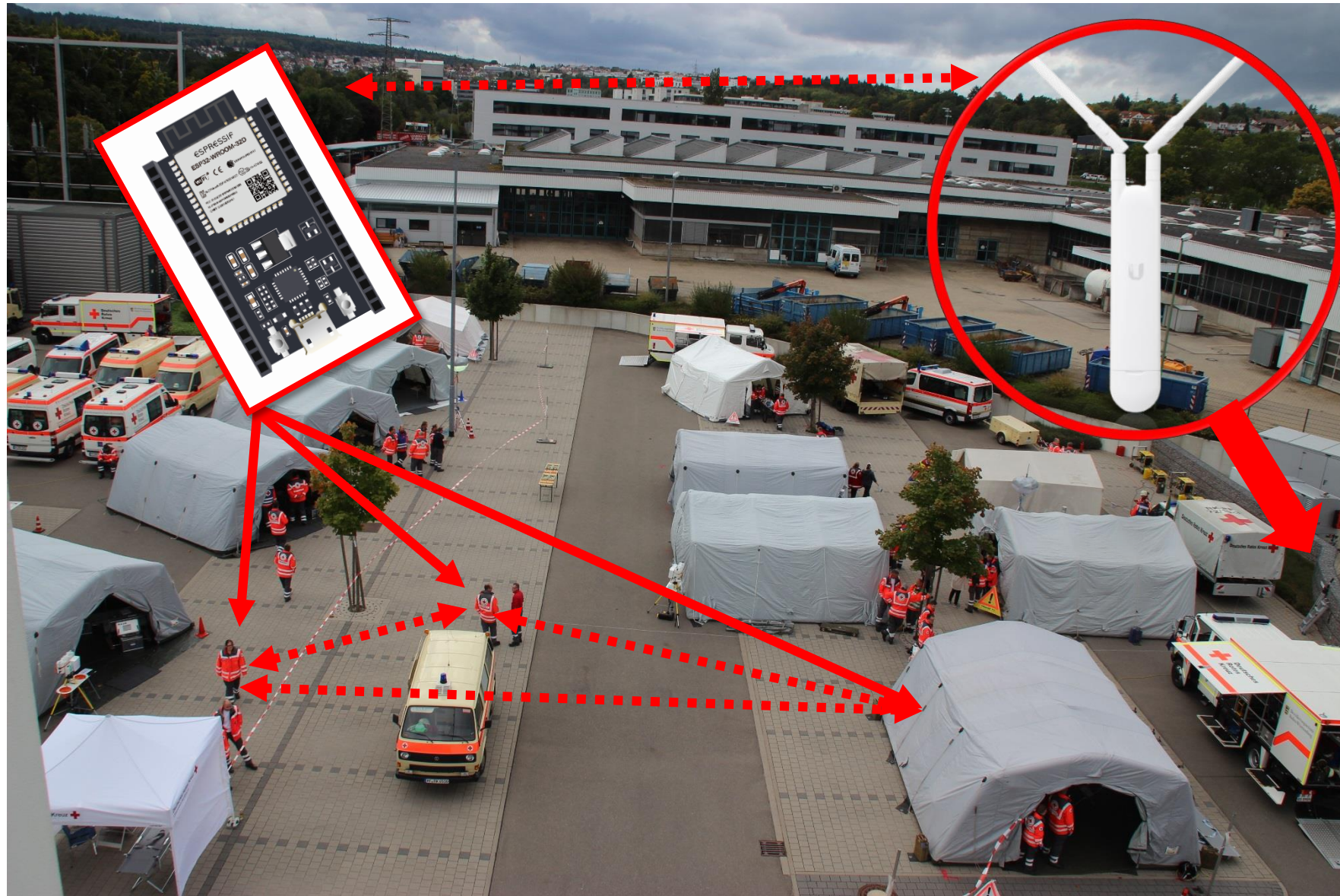
- 34C3 Initial hacking (December 2017)
- 2018: Evaluation of existing approaches ... :-)
- 2018: Development started
 - JellingStone: ESP32 firmware (C, esp-idf)
 - Fieldmon: UI / workbench (TypeScript, Angular)
 - StoneAggregator: data fusion / middleware (Python, paho mqtt)
- 2019: First deployment



2. First Deployment Pforzheim 2019

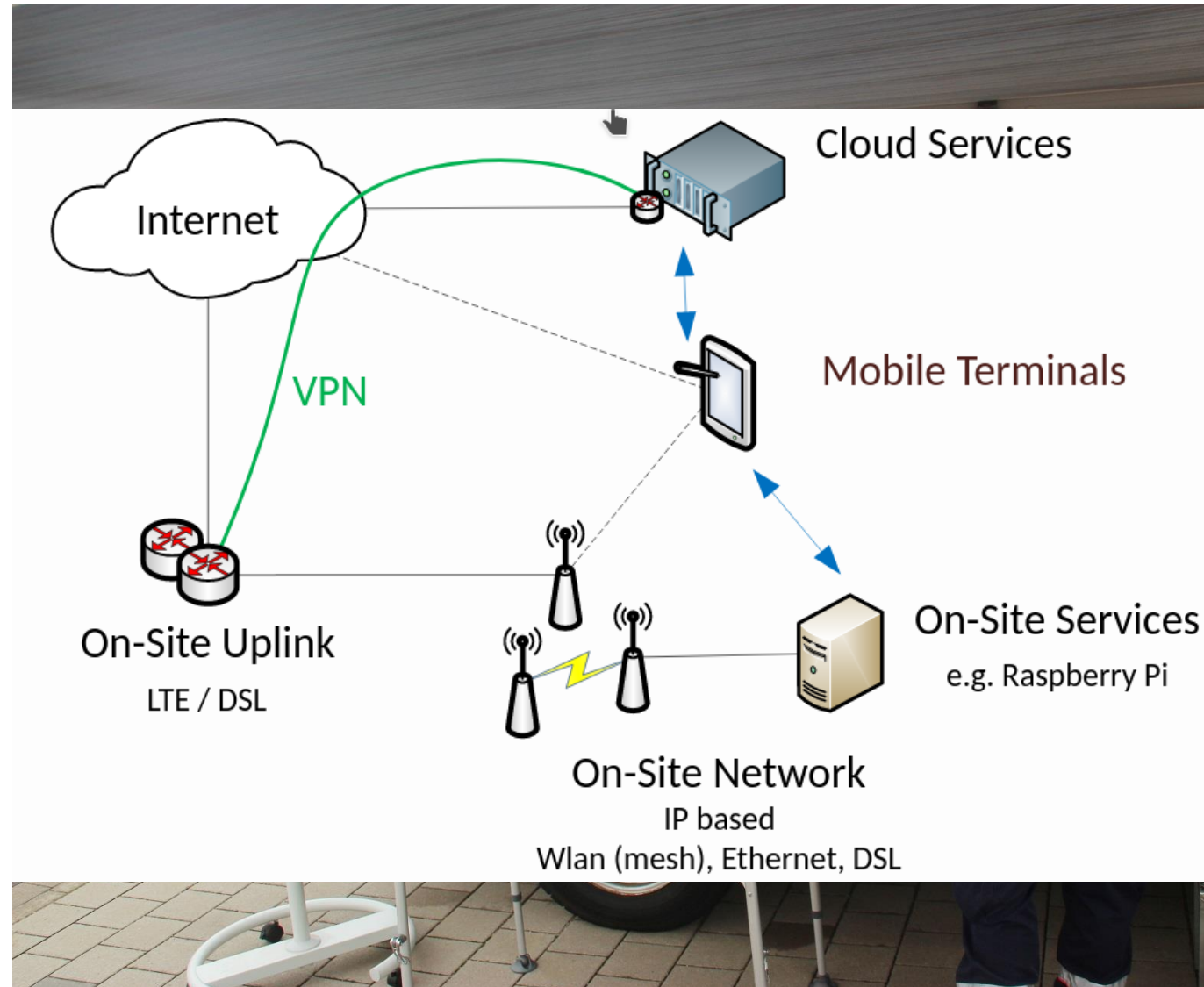


2. First Deployment Pforzheim 2019 (2)



3. Status & Challenges

- System works
 - ... basically ... proof-of-concept... 😊
- **Challenge no. 1: User-Experience (UX)**
 - Non-IT personal
 - Rapid deployment
 - Interactive visualization / User-Interface (UI)
 - Not suitable: c3nav, traccar, ...
- Techniques
 - Web- and mobile development
 - Bluetooth beacons & positioning
 - Embedded systems
 - Heterogeneous mesh & overlay networks
 - WLAN (IEEE 802.11)
 - DSL (ITU G992.5)



4. Summarizing

- **Contributors welcome!**
 - It's fun and challenging 😊
 - It's a real world thing
- Homepage
<https://fieldtracks.org>
- GitHub
<https://github.com/fieldtracks>
- Matrix
[#ft-public:matrix.org](https://matrix.org)
- **Questions?** – fosdem@yanosz.net



Disclaimer: Military usage is excluded using COSLi, an OpenSSL based license - <https://cosli.eu>

Insight Fieldtracks - yanosz - fosdem@yanosz.net - <https://fieldtracks.org>