Implementing Local Energy Markets - An IT-Architecture Design

Bent Richter (IISM), Armin Golla (IISM), Klaus Welle (Selfbits), Philipp Staudt (IISM), Christof Weinhardt (IISM)

Challenges

- Lack of research for local energy market IT-infrastructure and its architecture
- Selection and evaluation of the overall structure and technologies
- Long-term assessment of IT-Architecture
- Lack of testing architectures in real-world implementations
- Evaluation of performance, collection of experiences and lesson learned missing

Implementation

- Implementation in the Landau Microgrid Project (LAMP)
- Four Modules with functional tasks:

- Smart Meter Hardware: Collection of Data
- User Application: User Interface with the IS
- Market: Matching Bids / Creating Transactions
- Database: Storage of User and Energy Data

IT-Architecture
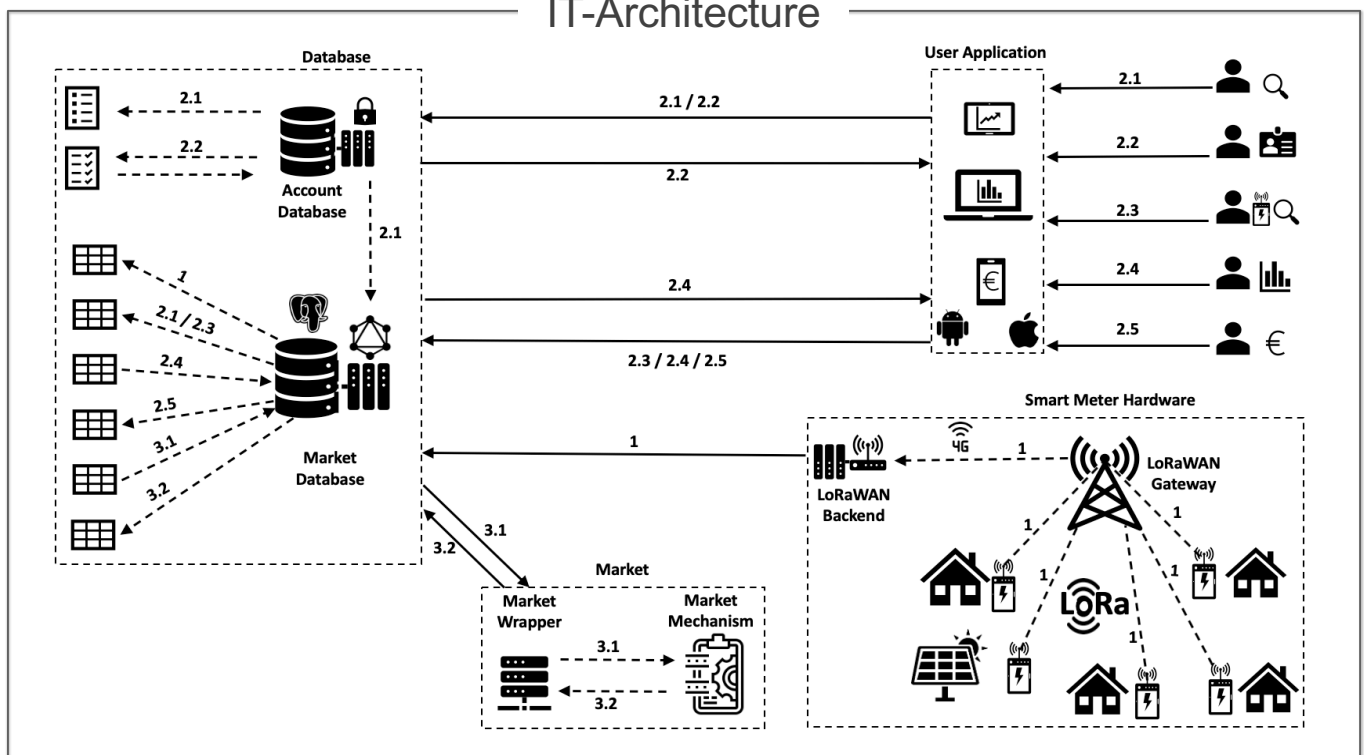
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Cooperation