A Solid-based Architecture for Decentralised Interoperable Location Data

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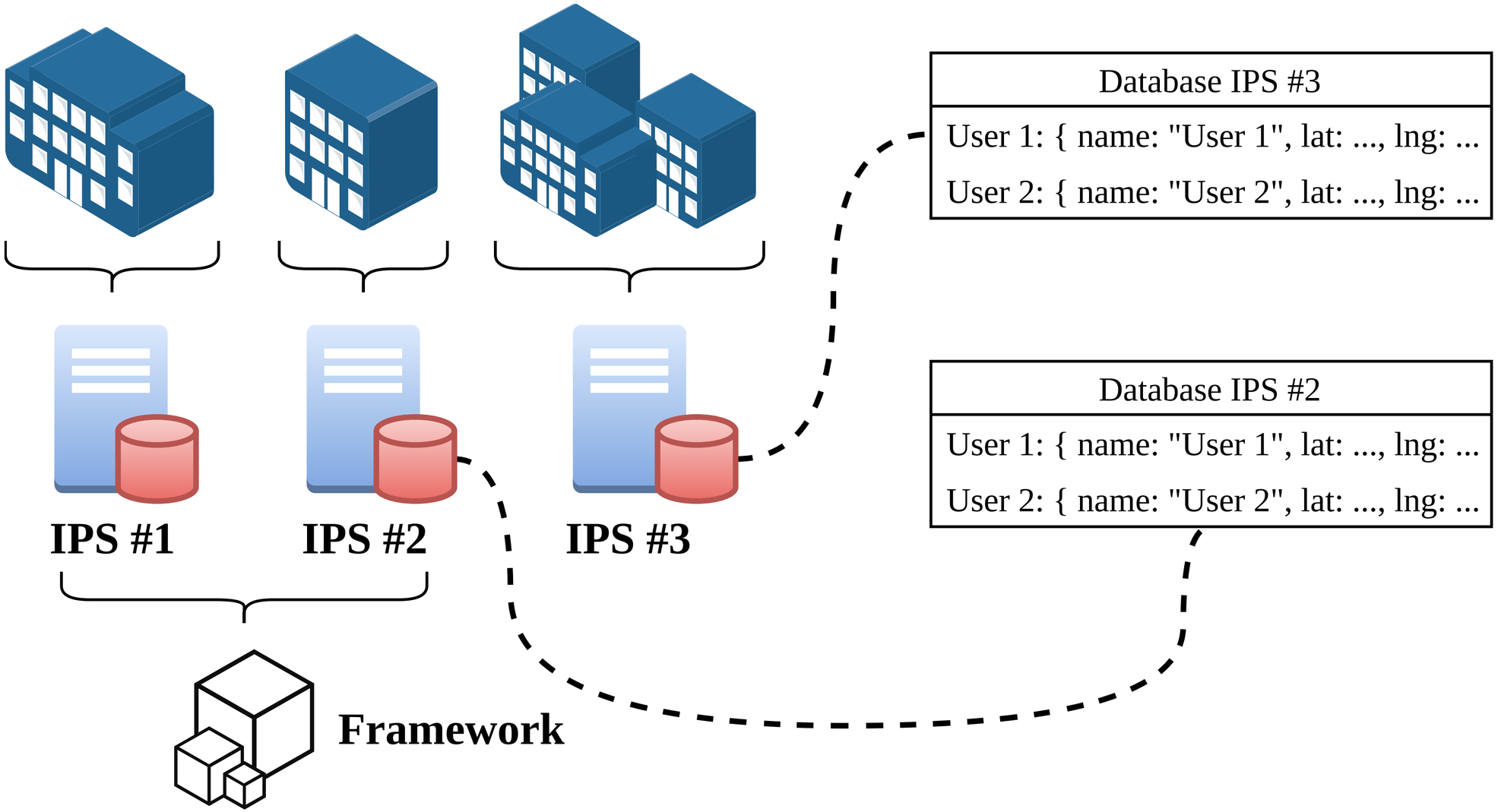
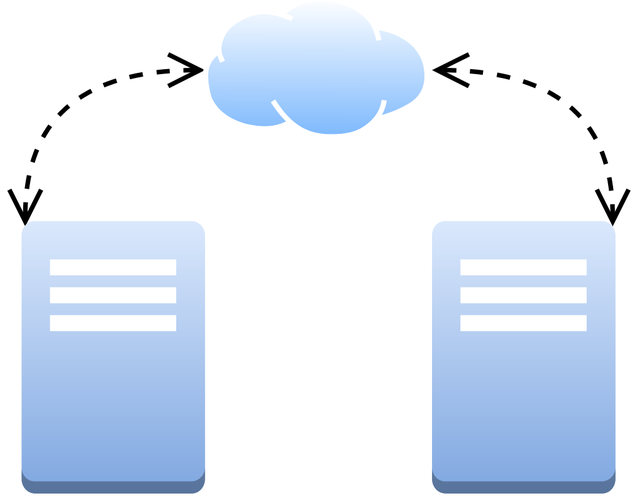
Current indoor positioning systems (IPS)

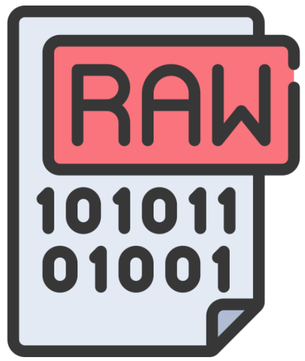


Problems with current IPS'

1. Users not in **control** of their **data**
2. No **interoperability** between positioning **systems**
3. No **interoperability** between (navigation) **applications**



Accessibility



Readability

Understandability

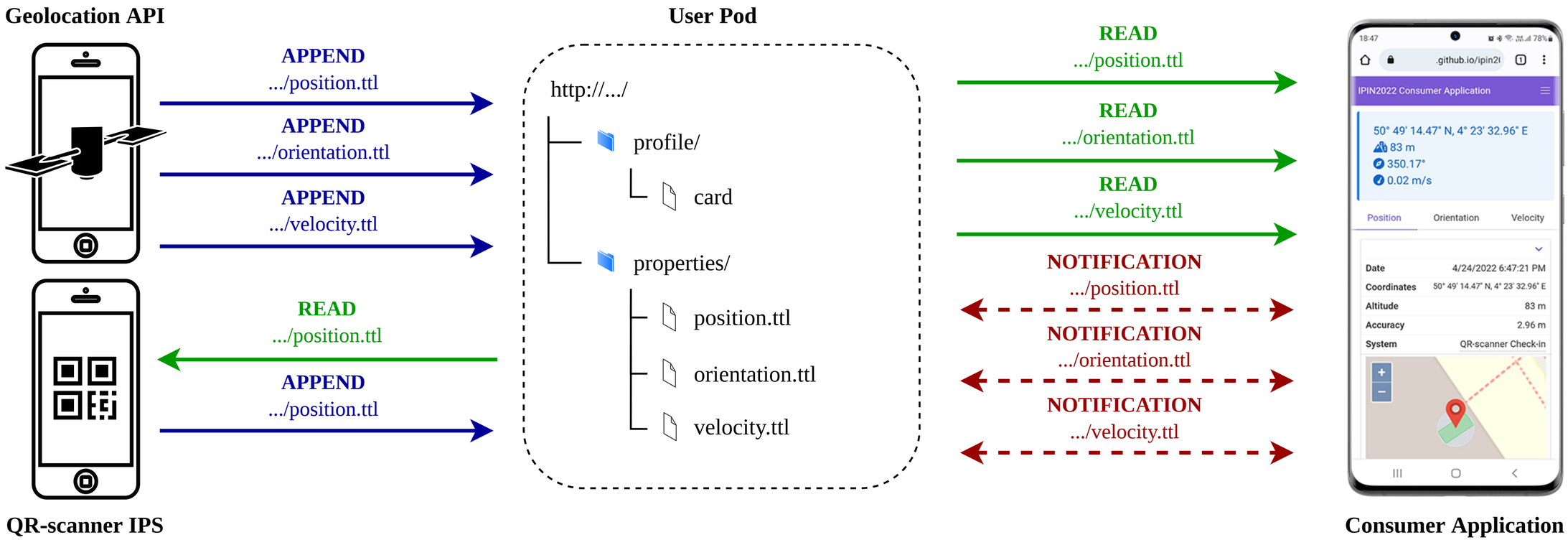
Decentralised interoperable architecture

Decentralised interoperable architecture

Core vocabularies: SOSA, SSN (W3C®)

Allignment vocabularies: GeoSPARQL (Open Geospatial Consortium®), QUDT

PoC demonstrator



Conclusion and future work

- Novel architecture for **decentralising** location **data**
  - **User** remains **in control** of their data
- **Interoperability** between systems and applications
  - High level decision fusion
  - Single **navigation** application
  - **Handover** of tracking between systems
- **Scalable** to raw sensor data

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