

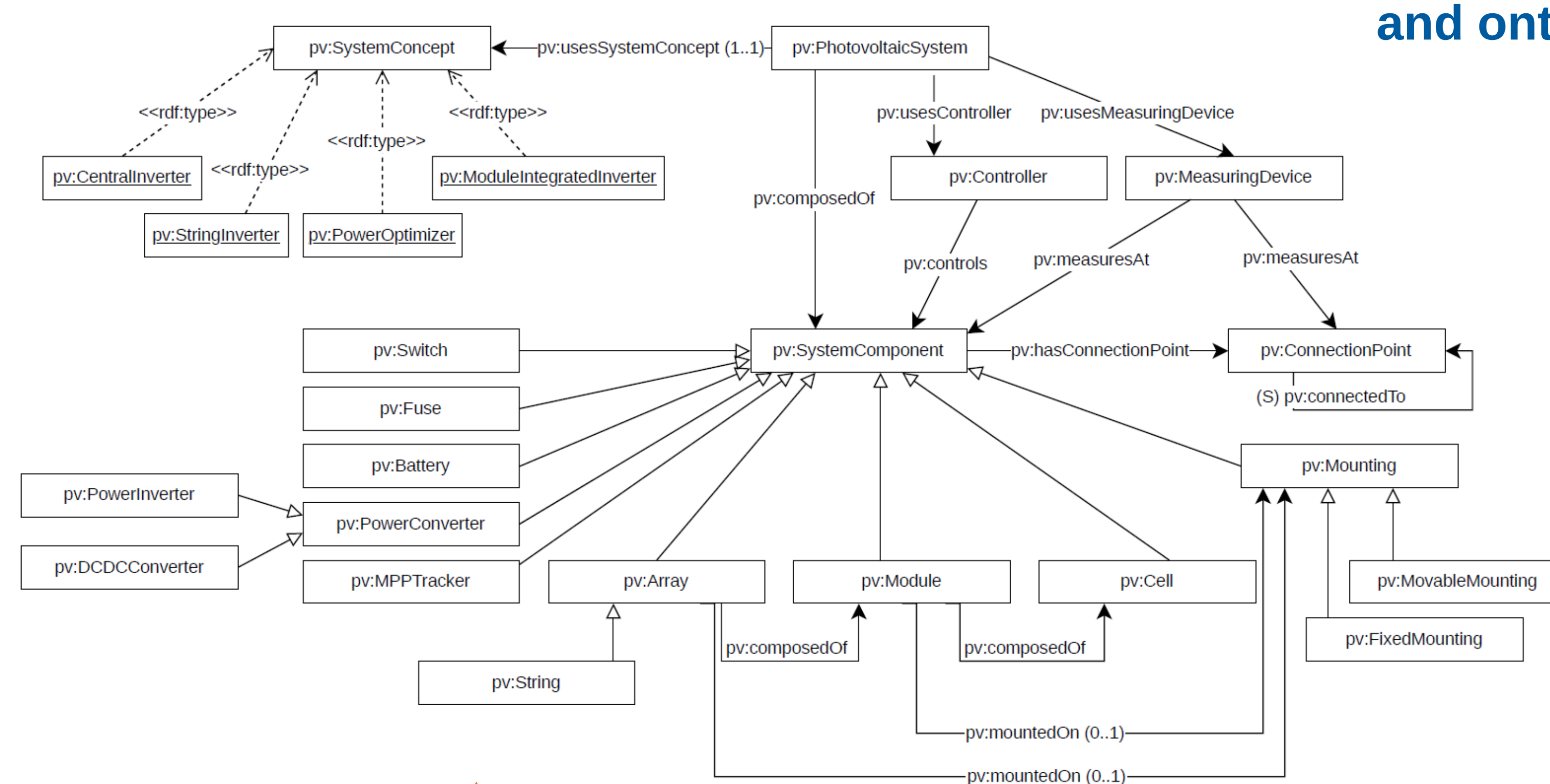
Use Cases and Tools in HMC Hub Energy

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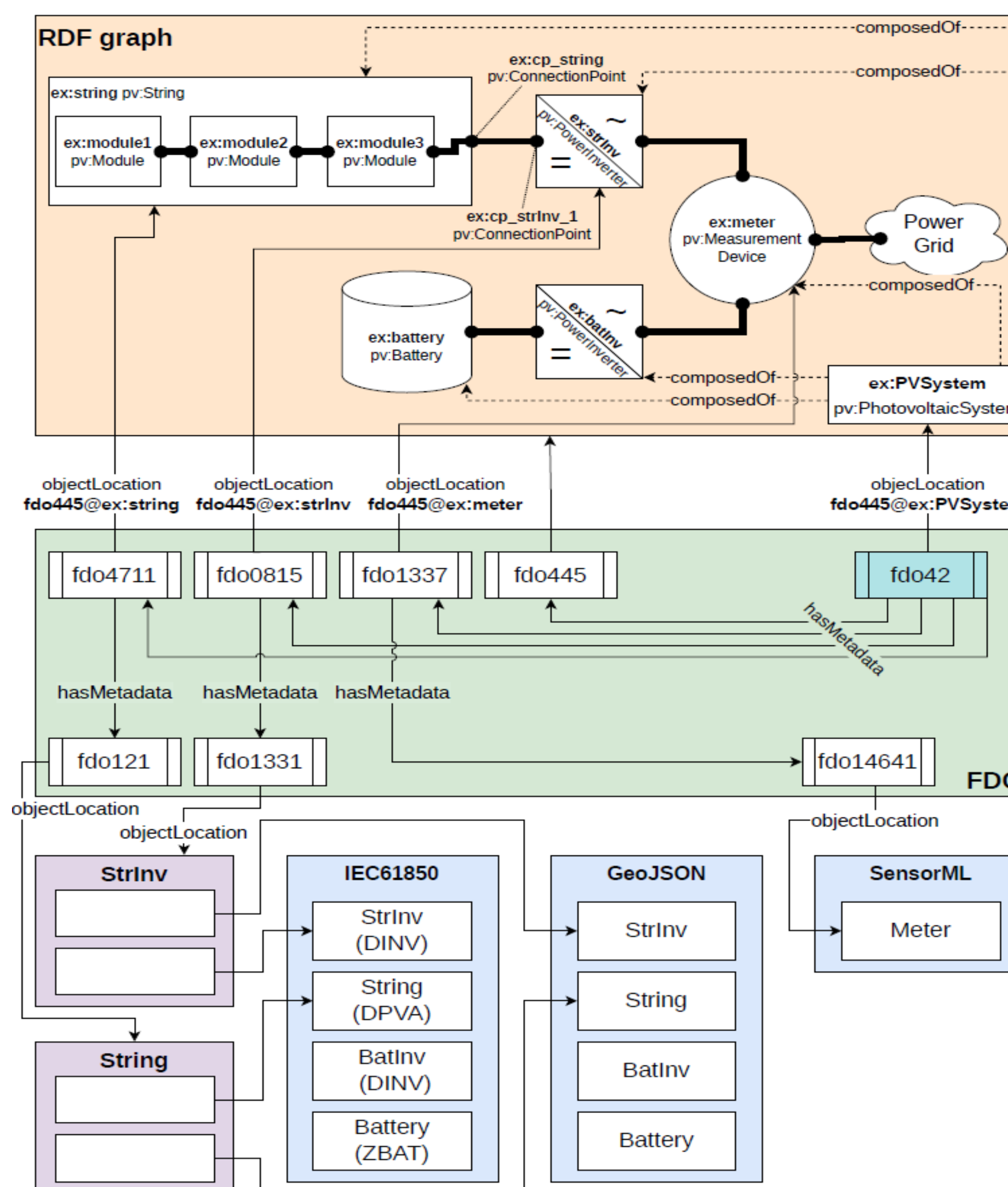
① Use Case Photovoltaic System

Data management based on FAIR Digital Objects (FDO) and ontologies



PV Ontology 1st Version

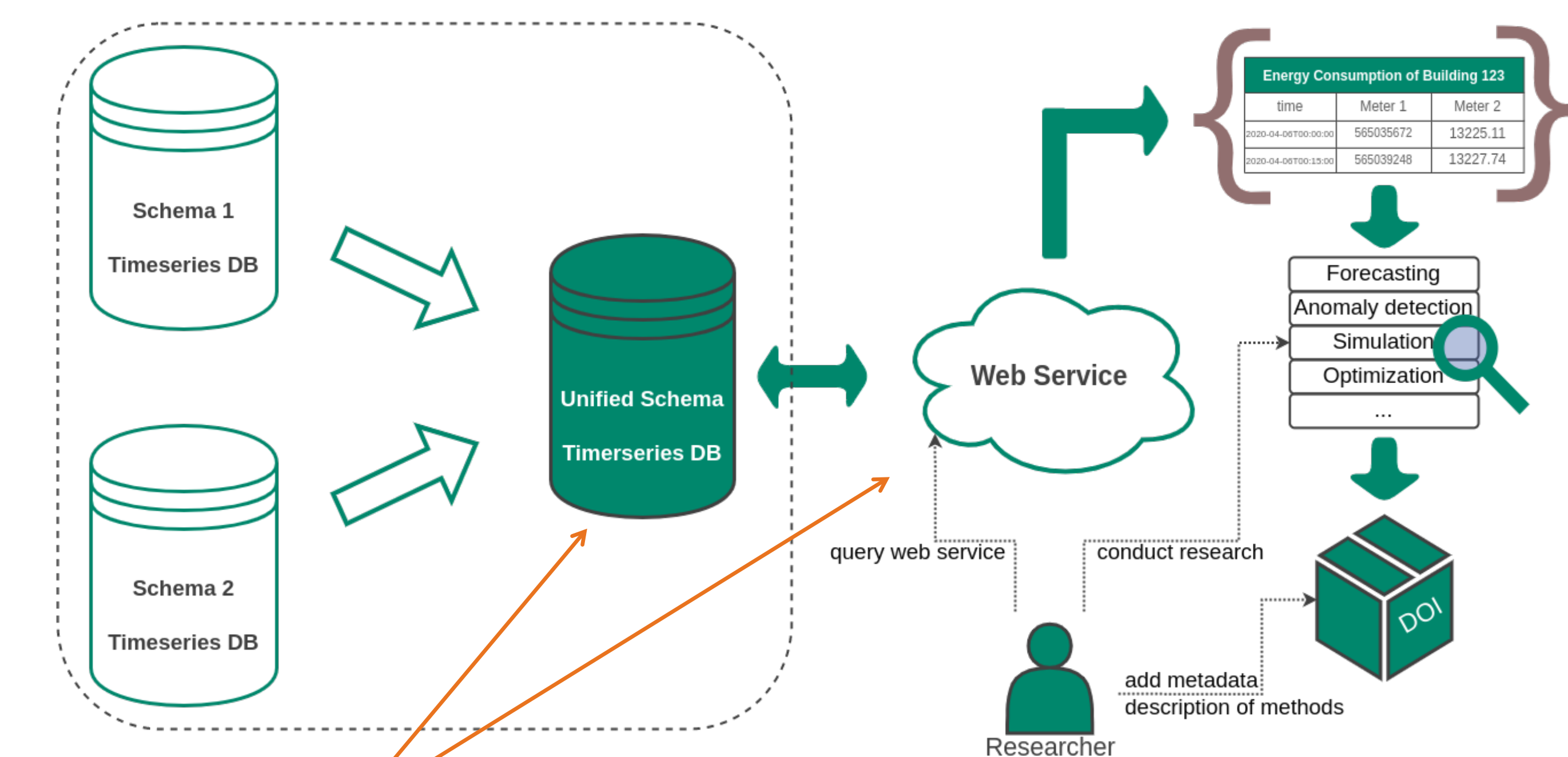
FDO-based PV system model



② Use Case: Consumption Data – RO-Crate Time Series Exporter

KIT - Campus North smart meter data

- Power, Heat, Water
- Export to an interchange format
- RO-Crates and standards (QUDT, CSVW, ...)

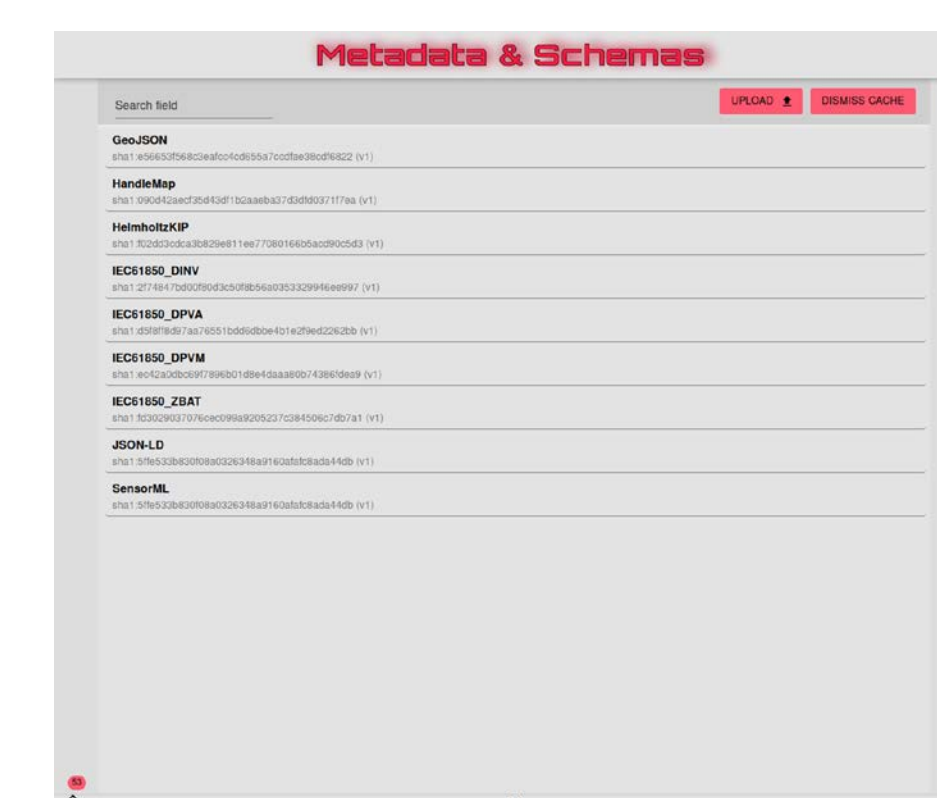


Substitute mutiple researcher-written scripts

③ Tool: FDO Browser

- Cascading search in FAIR Digital Objects (FDO)
- PID-Graph
- Semantic search
- Learning about data types
- Data Visualization implemented by plugins

④ Tool: Schema Browser



- Front end for schema services
- JSON Schema
- Metadata management
- Autocomplete
- Form generation
- Searching (schemas, properties, etc.)

Hub Energy: Participants + Contact



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