

DB for SDEU

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SDEU database components

UUB + its lifecycle

- list of UUBs + basic info
- tracking of applied retrofits – Zynq/MSP programming – repairs
- tracking of location (+purpose)

Test reports

- Fabrication test reports
- Environmental stress screening results
- Full functionality test reports

SDEU database implementation

- run on `https://auger-sdeu.farm.particle.cz/db`
- access protected by TLS and Auger passwd
- virtual machine with SL6
- python Django framework + MySQL backend
- flexible combination of web forms and routines for automatic data processing (import / export)
- outlook: replication & synchronization to Malargüe

Fabrication test report

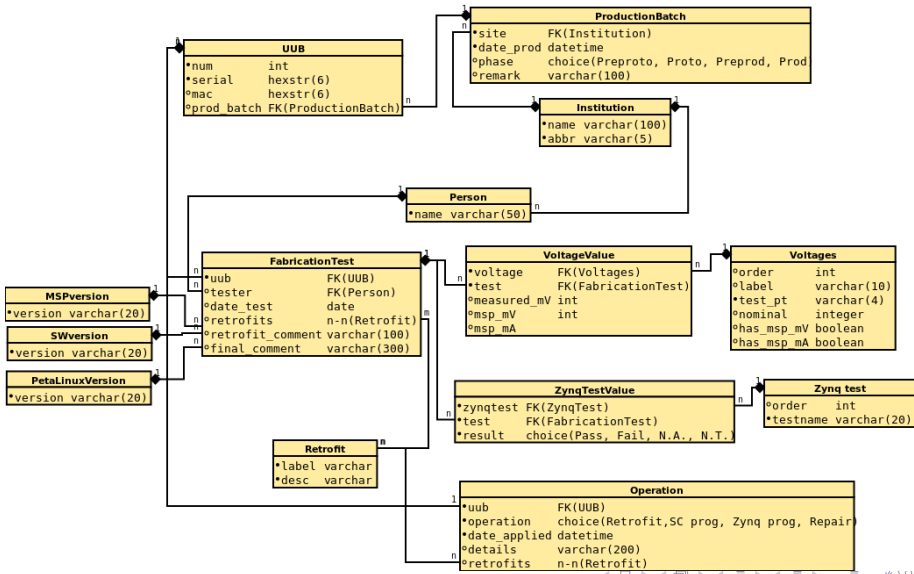
- test performed in KIT
- web form for entering / displaying reports

stored data:

- applied retrofits
- measured / SC reported voltages & currents
- on-board tests

- also independently developed in KIT
- discussion about data transfer

SDEU DB model – Fabrication test part



ESS test

- acquired data formatted and transferred to DB by ESS control SW
- data presentation under development

data per test

- list of tested UUBs
- temperature profile & measurement points
- measured temperatures and humidities, SC values (voltage, currents)

data from each measurement point

- test signal of various voltage amplitudes sent to UUBs, data acquired
- fitted by a model function \rightarrow pedestal + std. dev., amplitude of the test signal
- linearity (ADC count vs input voltage), HG /LG amplification ratio

SSD test – questions to answer

data

- what data will be stored, DB data model

data insertion

- how data will be inserted: manually / automatically
- transfer protocol

data presentation

- how data will be presented to end-users (definition of views)
- procedure for automatic data processing (e.g. JSON over HTTPS)

one responsible person

- person who decides DB functionality