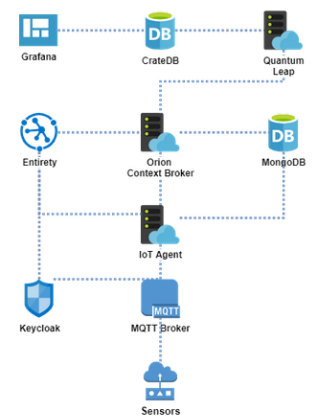


## Master-Thesis:

# Development of Cloud Sensing and Monitoring Layer for Power Device

### Context:

The goal of this task is to provide a tailored interface for the data collection from networks and the transmission of commands/setpoints for the safe and reliable operation of the system. The data collected by the field instruments will be provided to the Open ICT platform according to a specific data model. The acquired data will be leveraged for the energy services developed. The sensing and monitoring layer specification will be technology-independent, but a reference implementation will be developed by extending existing DC and AC monitoring infrastructures by adopting and upscaling FIWARE compliant solutions. On top of the monitoring layer reconciliation and harmonization tools are necessary to support all the key functionalities that the ICT platform will integrate. It is necessary to develop tools for reconciling, harmonizing and analysing monitoring data. The figure at the right side shows the existing software platform, which will be the starting point of this task.



### Tasks:

- Software development & system integration
- Analyses and evaluation

### Your Profile:

- Computer science or any related field
- Good programming skill and experience in Python
- Knowledge about Docker, MQTT and Linux are an advantage
- Interest in learning and testing

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