







BBDATA – Big Building Data

A cloud platform for data storage and processing for Smart Living Lab

Contact

HES-SO Fribourg Prof. Jean Hennebert jean.hennebert@hefr.ch

Keywords

- Smart Buildings
- Big Data analysis and processing
- Internet of Things

Our skills

Big Data technology stacks Machine learning techniques

Valorization

Enabling Big Data technologies for building management systems

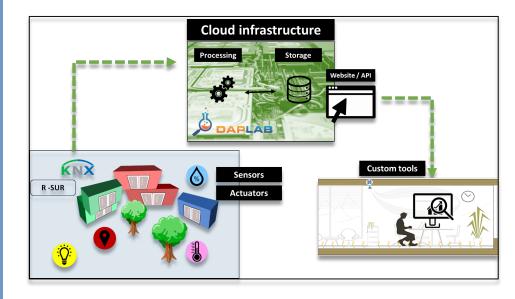
Partnership

- iCoSys HES-SO//Fribourg
- Energy HES-SO// Fribourg
- Smart Living Lab

Funding

Smart living lab HEIA-FR

Schedule 2016-2017



BBDATA stands for **Big Building Data** and aims at developing a scalable cloud platform and tools for storing and processing smart building data. The project is realized in collaboration with the <u>Smart Living Lab</u> (SLL), a long term project which aims at developing the buildings of the future. The services are targeting data access, processing and analysis, using open, robust, standardized and secured big data technologies.

Numerous sensors and actuators are located in the different buildings of the <u>blueFACTORY</u> site. These sensors collect measurements such as location, temperature, humidity, presence, CO2, electricity consumption, etc. Gateways are integrated enabling a seamless and **standardized way to communicate with all sensors and actuators** as if they would be simple Internet of Things devices. Thus, research teams and projects with eclectic protocols and in-house sensors can easily integrate with BBDATA.

BBDATA provides a shared cloud platform running **Big Data** technologies, enabling a low cost solution and a short time-to-research.

BBDATA services will also include machine learning capabilities for complex data processing such as discovery of correlations, event detection and modelling of non-linear phenomena. BBDATA will also offer information visualization tools for understanding and communicating of research results.