FARMSENS

GOALS

Goals in the Stage 1:

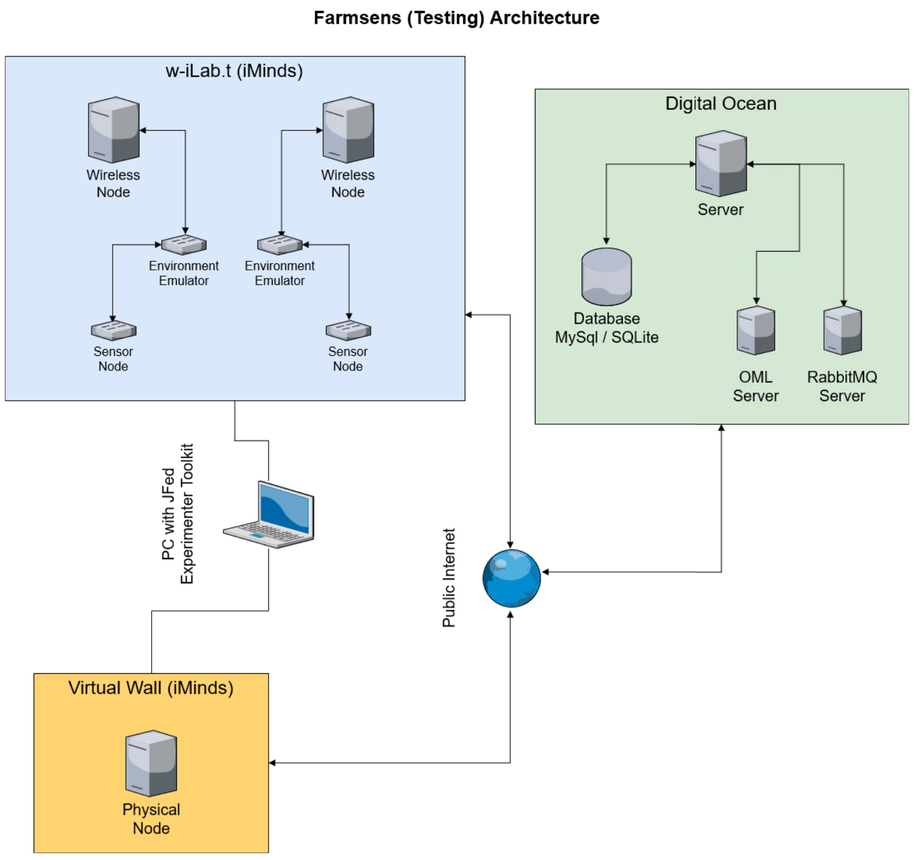
- to ensure technical conditions on the side of testbed resources (IoT sensors) and Farm Manager
- to execute live test run of data exchange between the sensors and our platform, using at least 5 different types of sensors.

CHALLENGES

Main challenges were to:

- get knowledge on IoT as we had no any experience with it before
- learn about zotac nodes & sensors
- establish software infrastructure (OML, RabbitMQ)

DEMO SETUP



RESULTS

Technical conditions were established and the experiment was running live for 4 days:

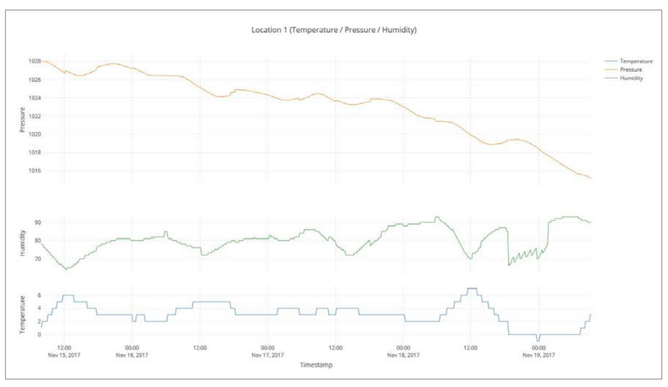
- 5 types of sensors (nodes) used
- 6 types of measurements
- total 3504 sensory data collected (584 per each type of measurement)
- we exported data and made simple chart visualisation of them using online tool Plotly

Objectives were successfully completed.

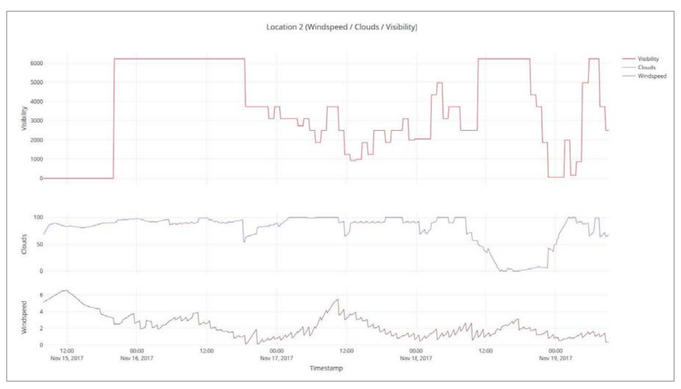
We also learned about the IoT sensors and integration of sensory data into our farm management platform.

Prepared for Stage 2.

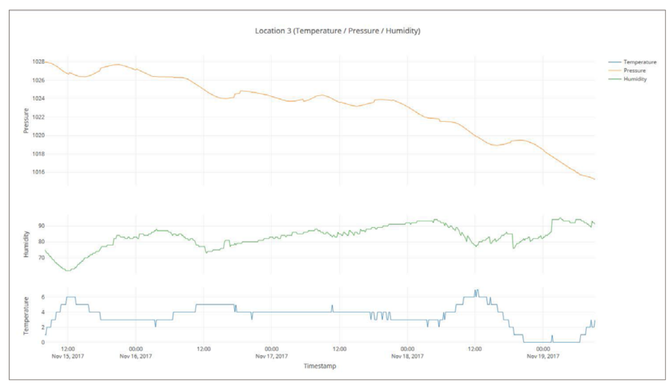
MORE RESULTS



Location 1 (Temperature, Pressure, Humidity)



Location 2 (Windspeed, Clouds, Visibility)



Location 3 (Temperature, Pressure, Humidity)

CONCLUSIONS

Stage 1 of the project was sucessfully finished.

We have prepared for the Stage 2 and submitted the proposal (not selected).

Thanks to the experiment we conducted within Fed4FIRE+, Telesis made one step closer with Farm Management platform to be integrated with live sensory information and provide improved predictive farm calculations.

ABOUT FARM MANAGER & PLANS

Farm Manager is a cloud-based platform for management and planning of fields, operations and production, calculating the outcome and getting statistical information about the farm in general.

Plans for the future:

- full integration with live IoT sensory data (living lab)
- improve predictive model & farm calculations
- expand the product to other fields and industries