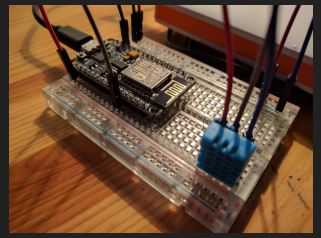
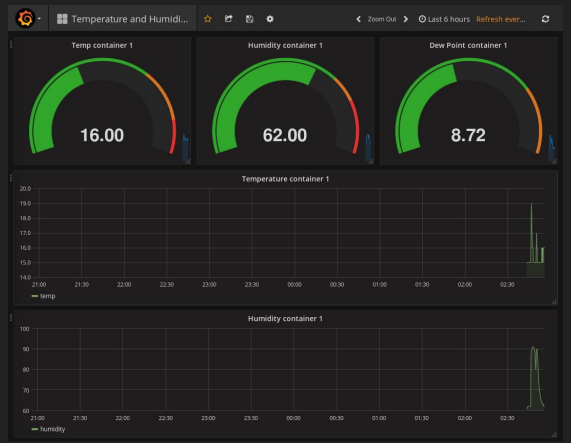
Does your coffee machine speaks Bocce ?

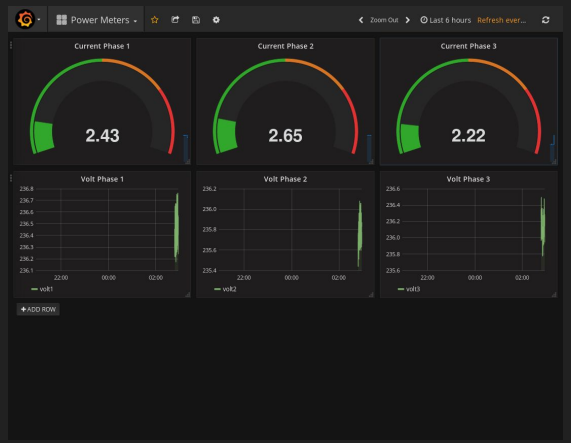
Internet of Things devroom, FOSDEM 2017
Yaacov Zamir <yzamir@redhat.com>

Demo

We will show how to combine free software tools and protocols from the worlds of IT monitoring, Industrial control and Internet of Things to create simple yet robust dashboards.







Grafana

Modbus

Modbus

Modbus is a serial communication protocol developed in 1979 for use with programmable logic controllers (PLCs).

It’s openly published, royalty-free, simple and robust.

https://github.com/yaacov/node-modbus-serial

https://www.npmjs.com/package/node-red-contrib-modbus

https://github.com/bashwork/pymodbus

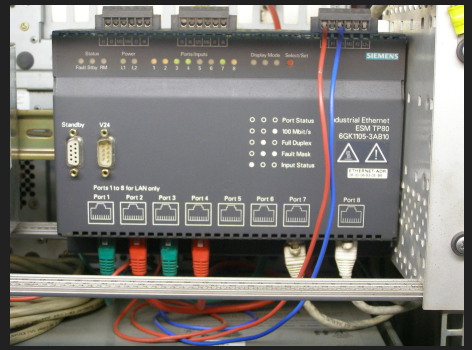
Sensor

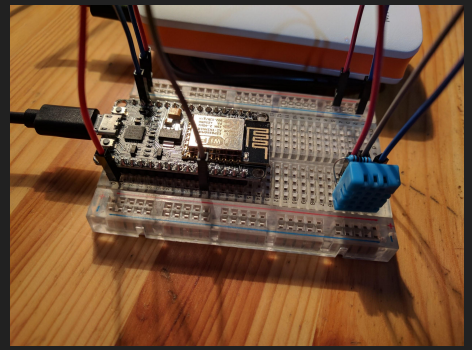
Any modbus capable controller (TCP or RTU).

It is very easy to teach devices to speak modbus.

https://github.com/yaacov/ArduinoModbusESP

https://github.com/yaacov/ArduinoModbusSlave





Collector

Collecting metrics from device and store the data in a data store.

https://github.com/yaacov/node-modbus-cli

https://github.com/yaacov/hawkular-client-cli

https://github.com/yaacov/fosdem-2017/blob/master/scripts/collector_sensor.sh

Data-store

Hawkular's goal is to be able to monitor things and catch anomalies in fast pace environments.

The project started around the end of 2014.

http://www.hawkular.org/

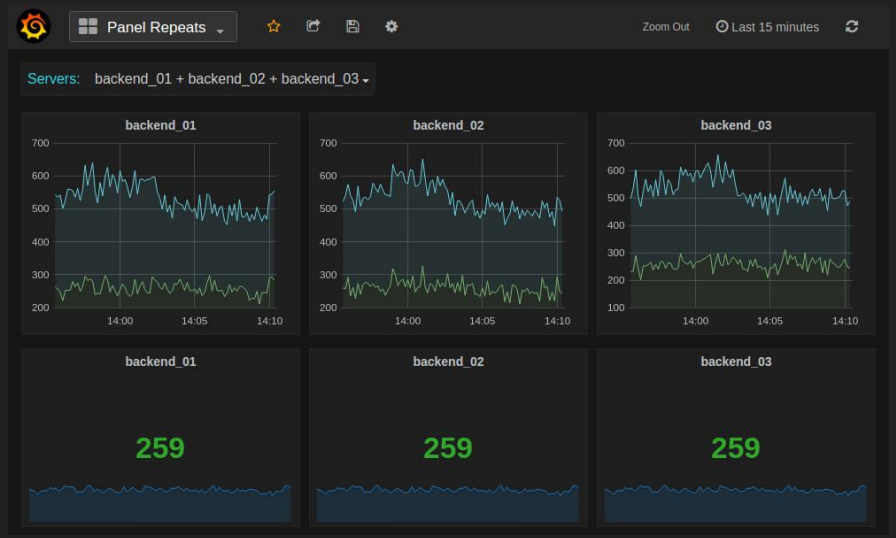
https://github.com/hawkular/hawkular-client-python

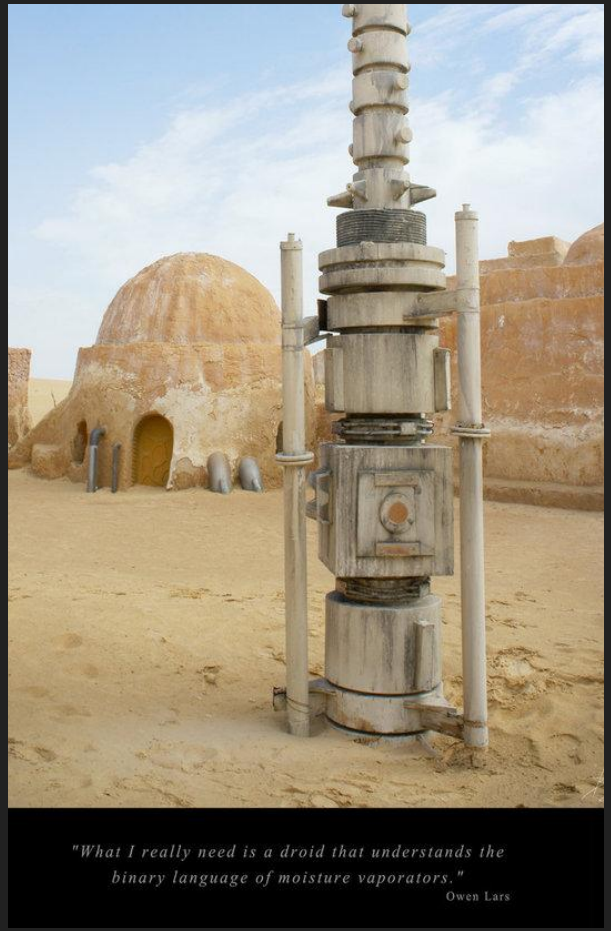
https://github.com/yaacov/mohawk

Visualizer

Grafana provides a powerful and elegant way to create, explore, and share dashboards and data with your team and the world.

http://grafana.org/





Questions ?

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