Does your coffee machine speaks Bocce ?

Internet of Things devroom, FOSDEM 2017
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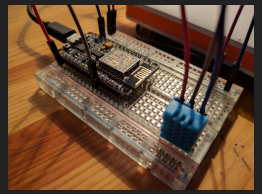
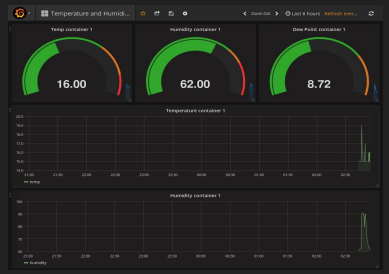
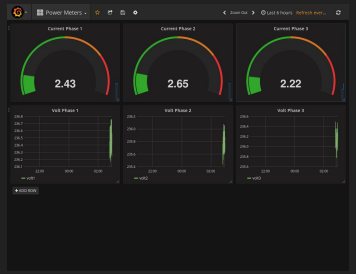
Demo

There are many IoT dashboards out on the web, most will require network connection to a server far far away, and use non standard protocols. We will show how to combine free software tools and protocols from the worlds of IT monitoring, Industrial control and IoT to create simple yet robust dashboards.







Modbus

Modbus is a serial communication protocol developed in 1979 for use with programmable logic controllers (PLCs). In simple terms, it is a method used for transmitting information over serial lines between electronic devices., 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

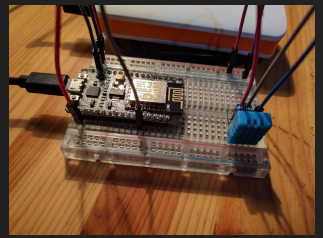
Sensor

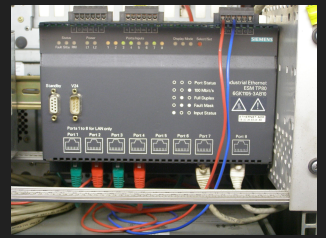
Any modbus capable controller (TCP or RTU).

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

It’s a hawk with a monocular. Hawks are known to have a very sharp vision and very good hunters, they can catch preys anticipating their movements at a very fast speed. The analogy with this project is our 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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ManageIQ

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