Monitor and Rule Engine

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Contents

Rule API

- Receive rule from UI and save it to the database (json format).
- Send rule data (json) to UI to display
- Send rule data to Rule Engine.
- Save data in Mysql database

Rule Engine

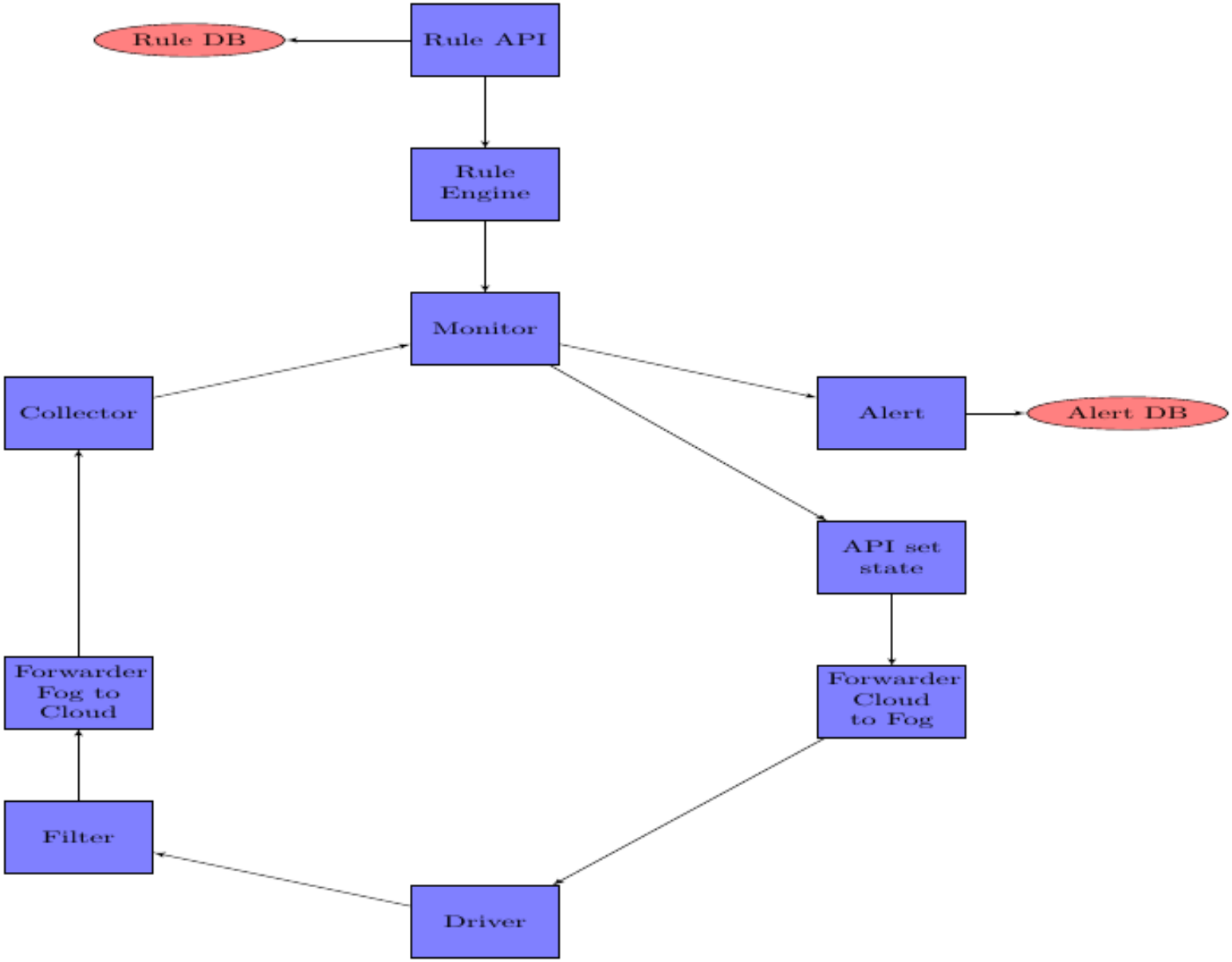
- Receive **active** rule from Rule API and transfer it to Monitor module.

Monitor

- Receive thing's information from Collector and rule from Rule Engine
- Check condition in rule with the thing's information. If the condition satisfy, do action
  - Send Alert / Set state
- To set state, using API set state from Quan.
- To Send Alert, using Alert module

Alert

- Receive message from Monitor module
- Save data to file.


Rule DB
Rule API
Rule Engine
Monitor
Collector
Alert
Alert DB
API set state
Forwarder Fog to Cloud
Forwarder Cloud to Fog
Filter
Driver

2

Sensor

- Three boxes, each box contain:
  - 1 motion sensor
  - 1 temp, 1 humidity, 1 photoelectric sensor
  - 3 LED: red, yellow, green
- Problem
  - Platfrom, Driver have latency, not match with sensor latency. It's make sometimes Driver receive wrong data
  - Can't set item (LED) almost same time. It's will make Arduino receive wrong data.

Future Works

- Intergrate with UI
- Define use cases
- Unify thing/item types, states between all platform.
- Implement more hardwares.

Thanks for listening