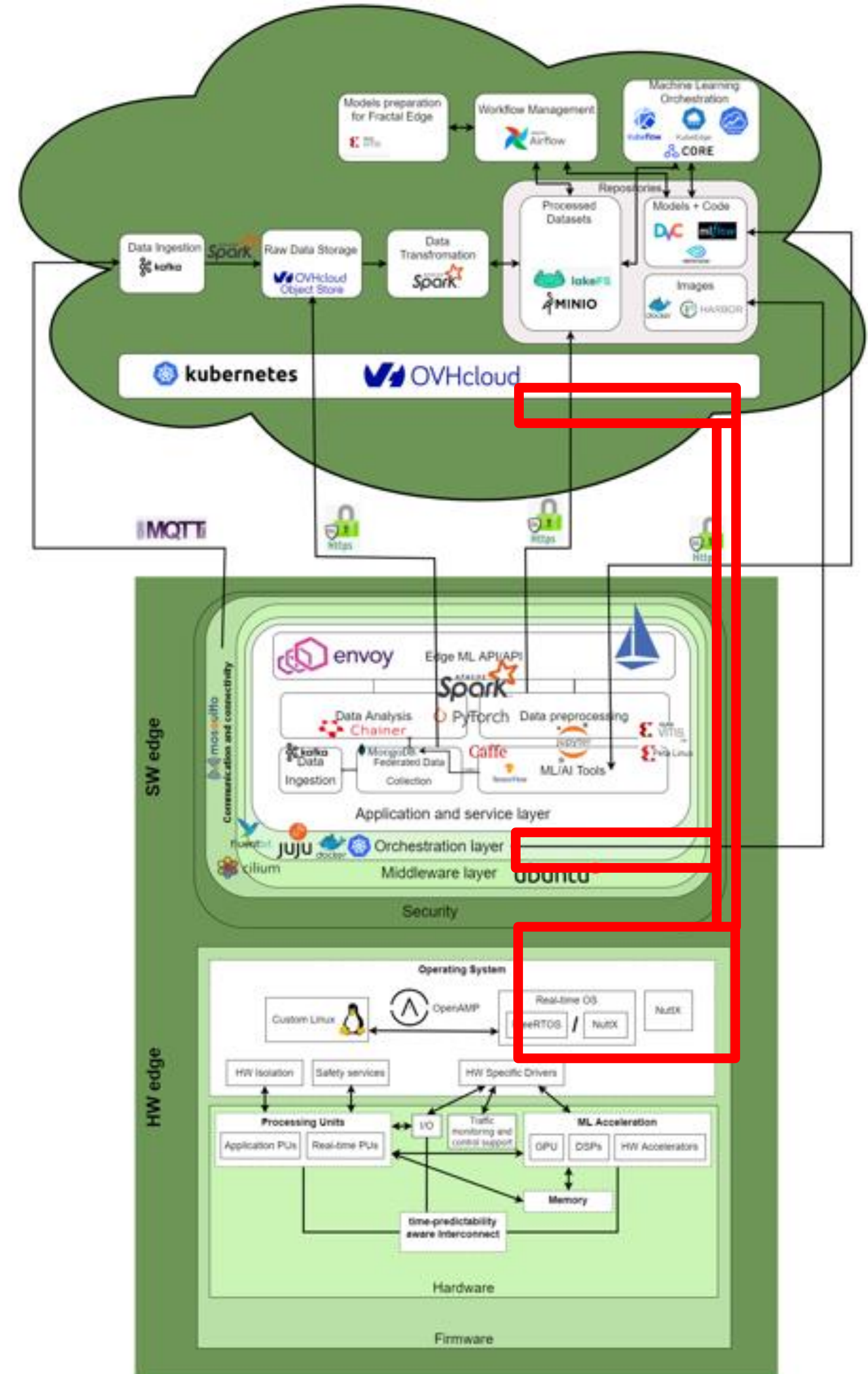




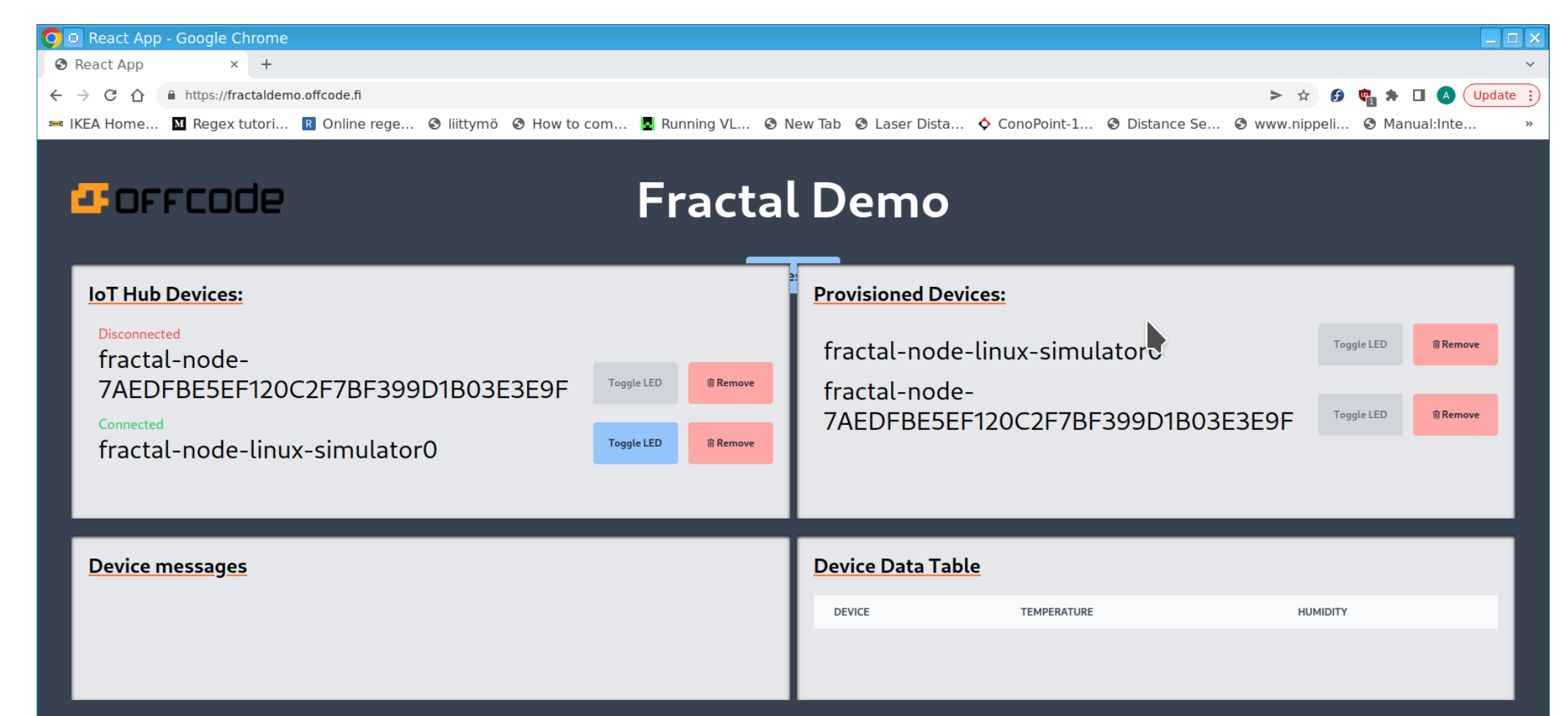
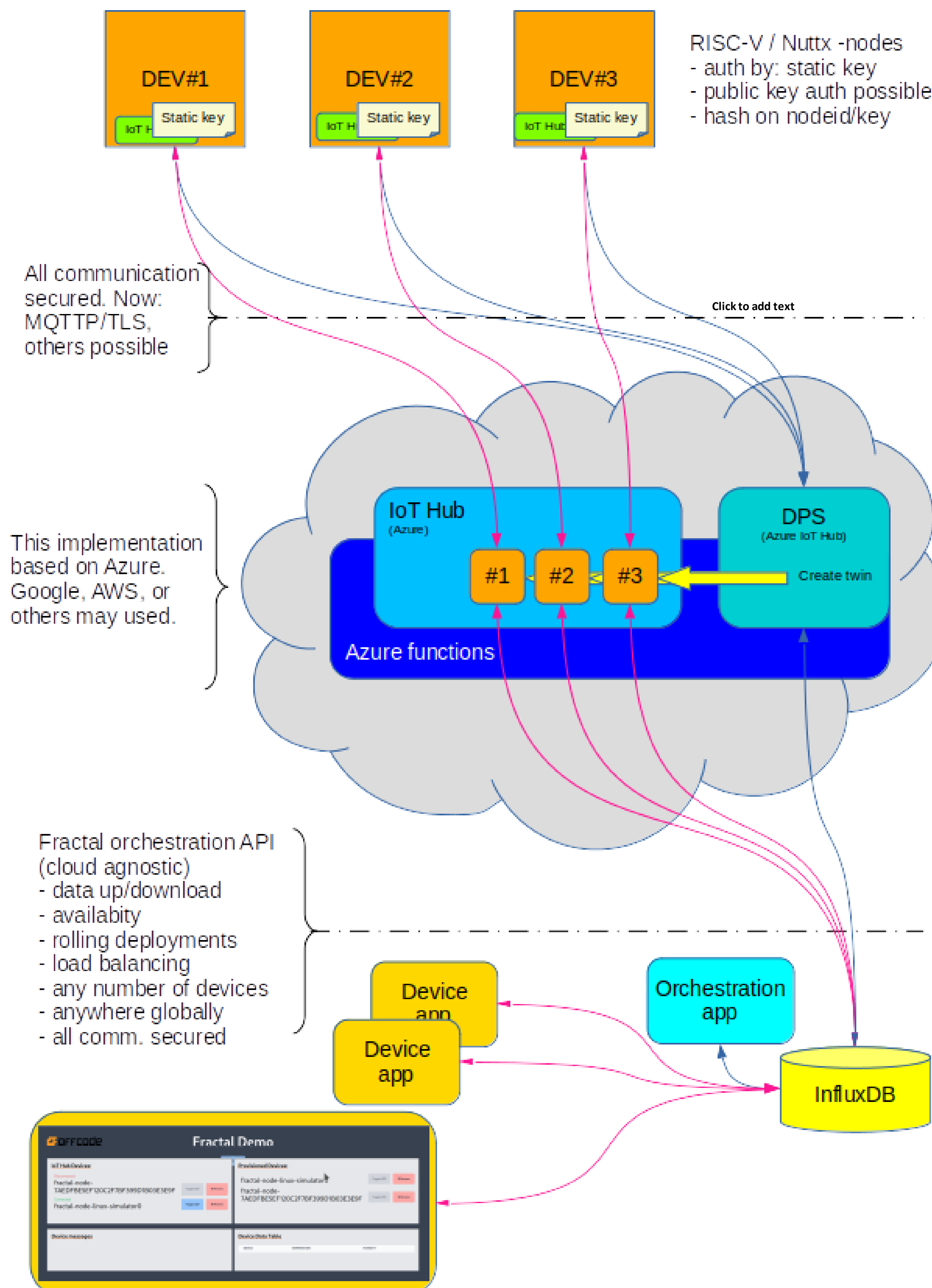
Low-end node orchestration architecture

Component location

- Objective of the component:
 - Realize a solution to orchestrate the Fractal low end nodes from Fractal cloud.
- Fractal Features associated:
 - ADAPTABILITY -->
- Inputs/Outputs:
 - INPUT: Static key on node and hash calculation of Node ID
 - OUTPUT: Connection request from Node to Fractal
- Integration:
 - Works on Nuttx based system RISC-V, PULP(*)



System overview



Offcode demonstration UI

Get started

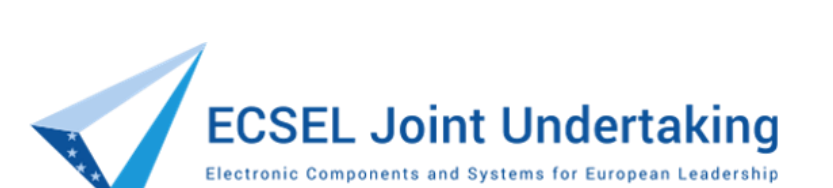
Pulp/Nuttx based systems have limited resources. Installing any of existing orchestration tools is not trivial. Challenges are typically the lack of memory/disk resources but also binary compatibility in commercial solutions.

On this solution, the lot Hub is ported to Nuttx (pulp) system and Azure cloud handles the authentication and the securing of the communication. A Cloud agnostic API is introduced for Fractal integration to Kubernetes.

(*) PULP FPGA implementation is bit limited due limited connectivity and clock speed of 10MHz



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