

SMART THINGS

INTEGRATION IN A SOFTWARE ARCHITECTURE

All wirelessly connected in a network of communication and interaction by means of embedded technology

COMPONENTS OF INTEGRATE SMART THINGS

Edges

Is where the cyber-physical entity or smart "thing" resides.



Types:

- Sensors. Ex: GPS, Temperature sensors.
- Actuators. Ex: Lights, Valves.

Network Infrastructure

Is where the communication and connectivity materialize.



Functionalities:

- Device Management.
- Device Connectivity.
- Device Store and Processing

Core

Is where the information coming from smart things is received and processed needs.



Elements to implement software:

- Set of backend component.

QUALITY ATTRIBUTES



COHESION

Each edge element represents a single sensor and actuator.



COUPLING

Each edge component is connected independently to the network infrastructure



RELIABILITY

- Recover from error situations.
- Use efficiently the energy.
- Prevent improper use.