Communicating Things in the Future Internet

Srdjan Krco

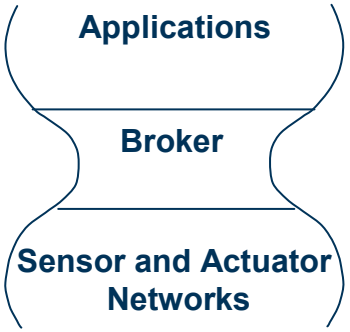
ERICSSON

TAKING YOU FORWARD

Open sensor market place

- Global collaboration and sensing
  - Complex sensor services opportunistically created using atomic sensor services avaialable at a given moment
  - Individuals, sensors embedded into everyday objects, companies using sensor information to support own business processes, commercial sensor network operators
- Open information market
  - Sensor information shared, contributed to community and social services, sold to interested parties
- Anyone can provide or sell sensor data easily
- Incentives to sensor network owners needed to make their sensors available and accessible
  - Community and social networks
    - Incentive: access to the community/social network
  - Commercial application
    - Money, free air minutes, something else?
  - Value of a WSN contribution variable
    - Accuracy, location, number of other similar sensors

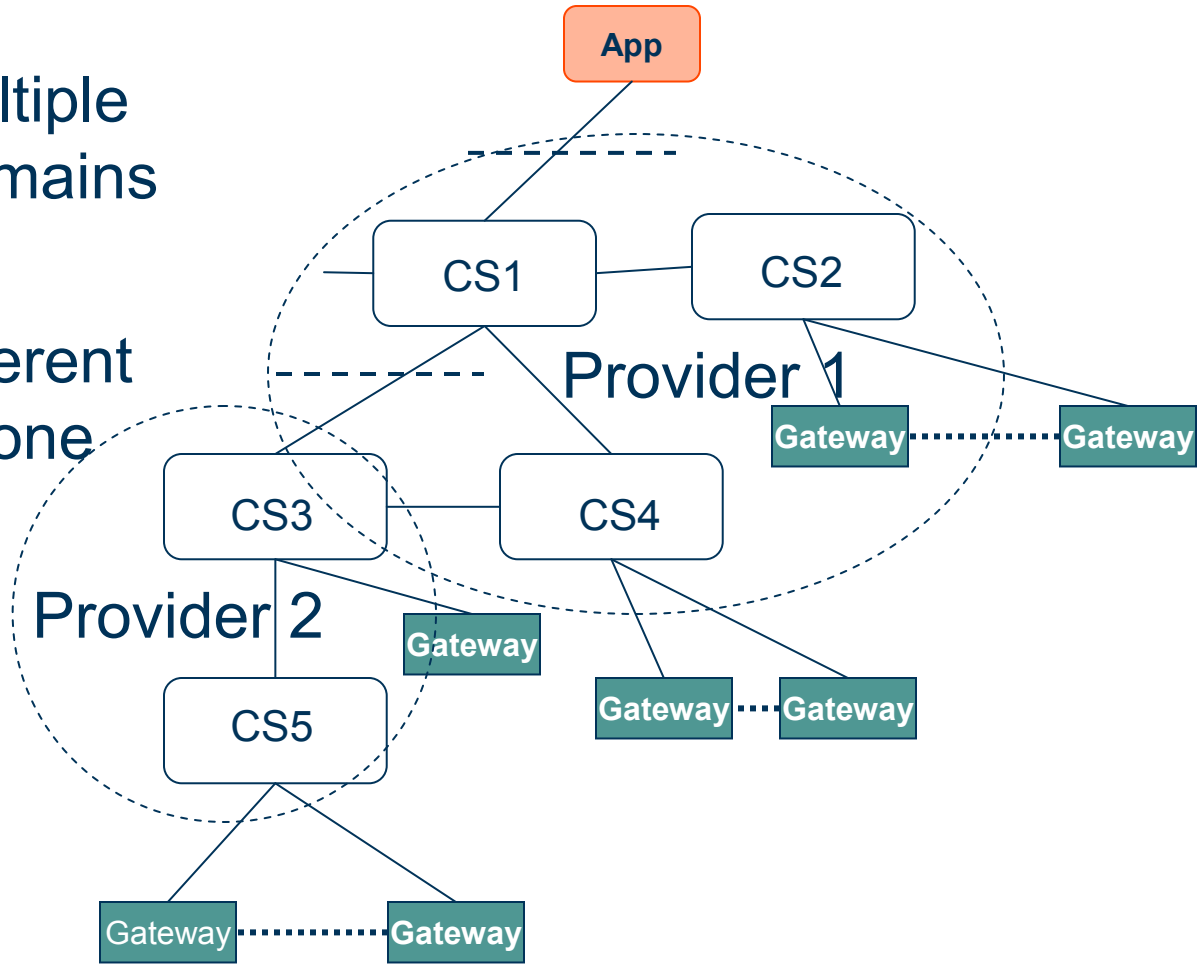
Broker and processing entity



- *Narrow convergence waist* between
  - Heterogeneous sensor networks below
  - Applications with diverse requirements on top
- Provides a set of enablers for all types of applications
  - Information exchange
  - Sensor network discovery
  - Data processing
  - Aggregation of atomic sensor network services (sensor mash-ups)
  - Common functions, like average over time and location

Broker and processing entity

- Distributed
- Spans across multiple administrative domains
- Roaming users
- WS&AN from different domains used in one application



Interactions with things

- How to deploy sensors and actuators?
- How to manage deployed sensors and actuators?
- The things can communicate but how can users task them in an intuitive way ?
- How to describe sensor tasks in a uniform way?
- How to control actuators?
- What is the impact on the existing network infrastructure?


ERICSSON
TAKING YOU FORWARD