

The IoT Inc Business Meetup Silicon Valley

Opening remarks and guest presentation



Bruce Sinclair (Organizer): bruce@iot-inc.com

Join us onsite or online on Oct. 20 at 6PM PST

Let's Build Indie IoT

Systems for our Homes Instead

Johannes Ernst
Indie Computing Corp



IoT Inc. Meetup Meet at www.iot-inc.com/meetups

Let's Build Indie IoT Systems For Our Homes Instead

Johannes Ernst
Indie Computing Corp.

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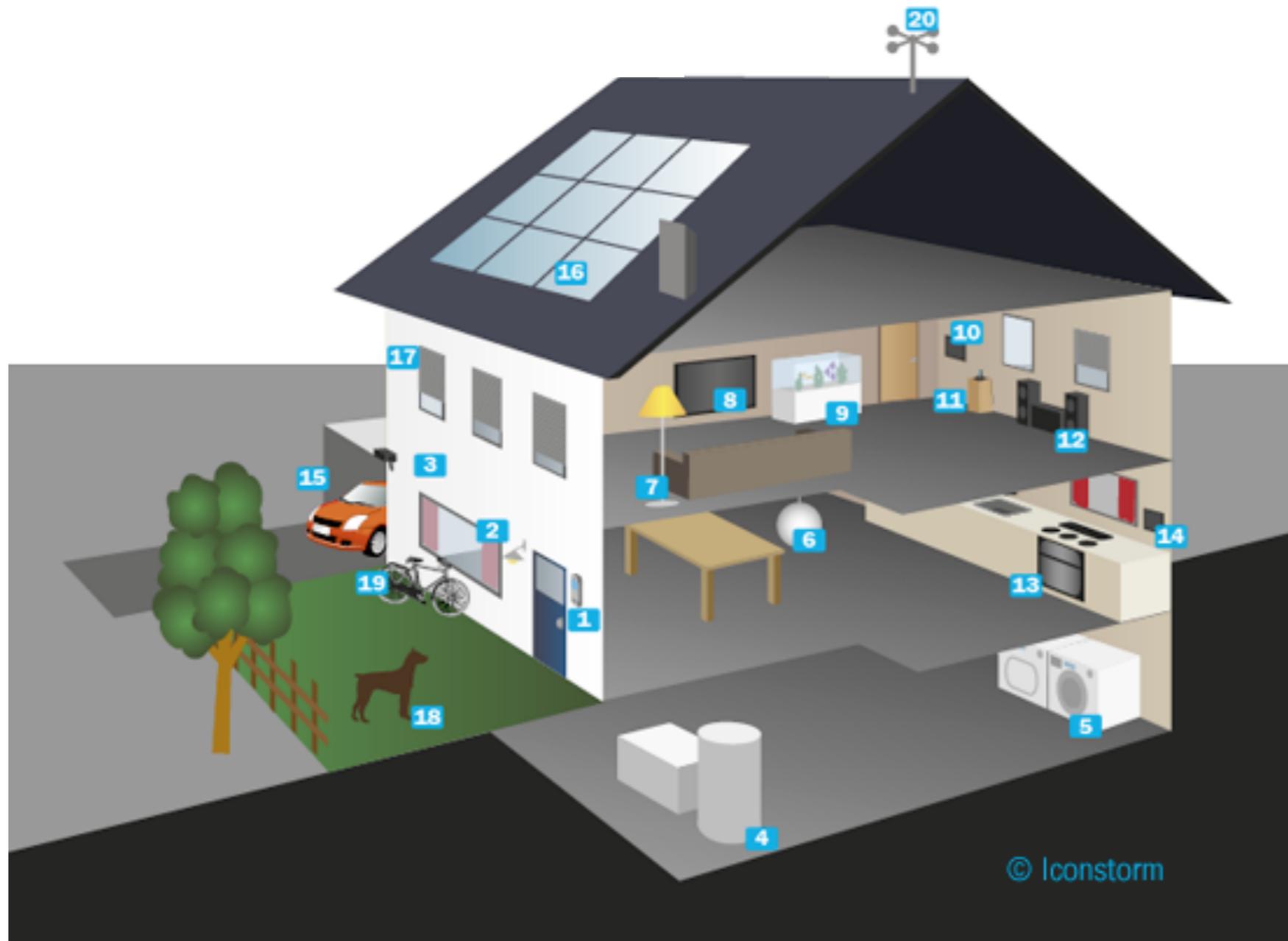


“Google ... told home audio vendors ...
they won’t be allowed to add any other ...
assistants than Google’s ...
if they want to ... use Google Cast”

What if Ikea said:
“No other furniture allowed.”

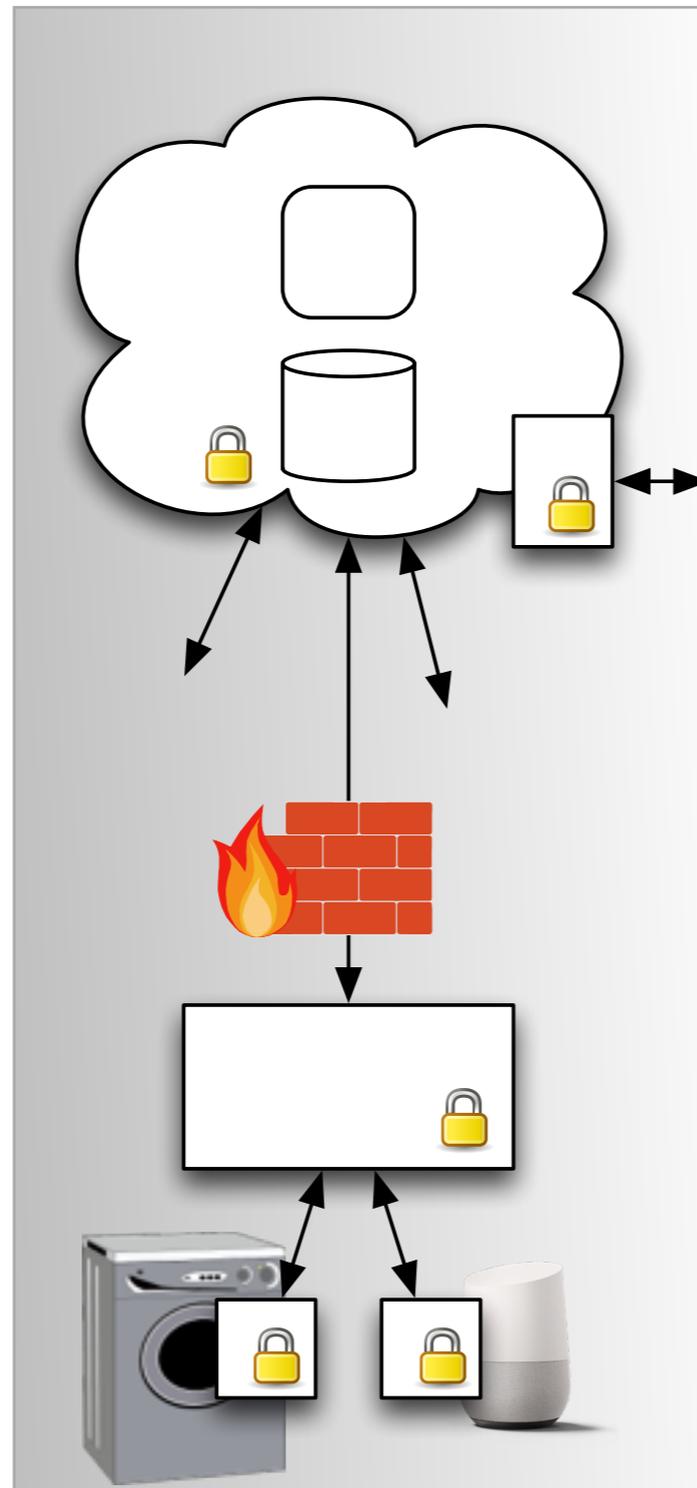


Your house in 2026



- ◆ How many connected devices?
- ◆ Which will interoperate?
- ◆ Who controls them?

Anatomy of an IoT cloud silo



Vendor cloud with
app, data, API

Gateway

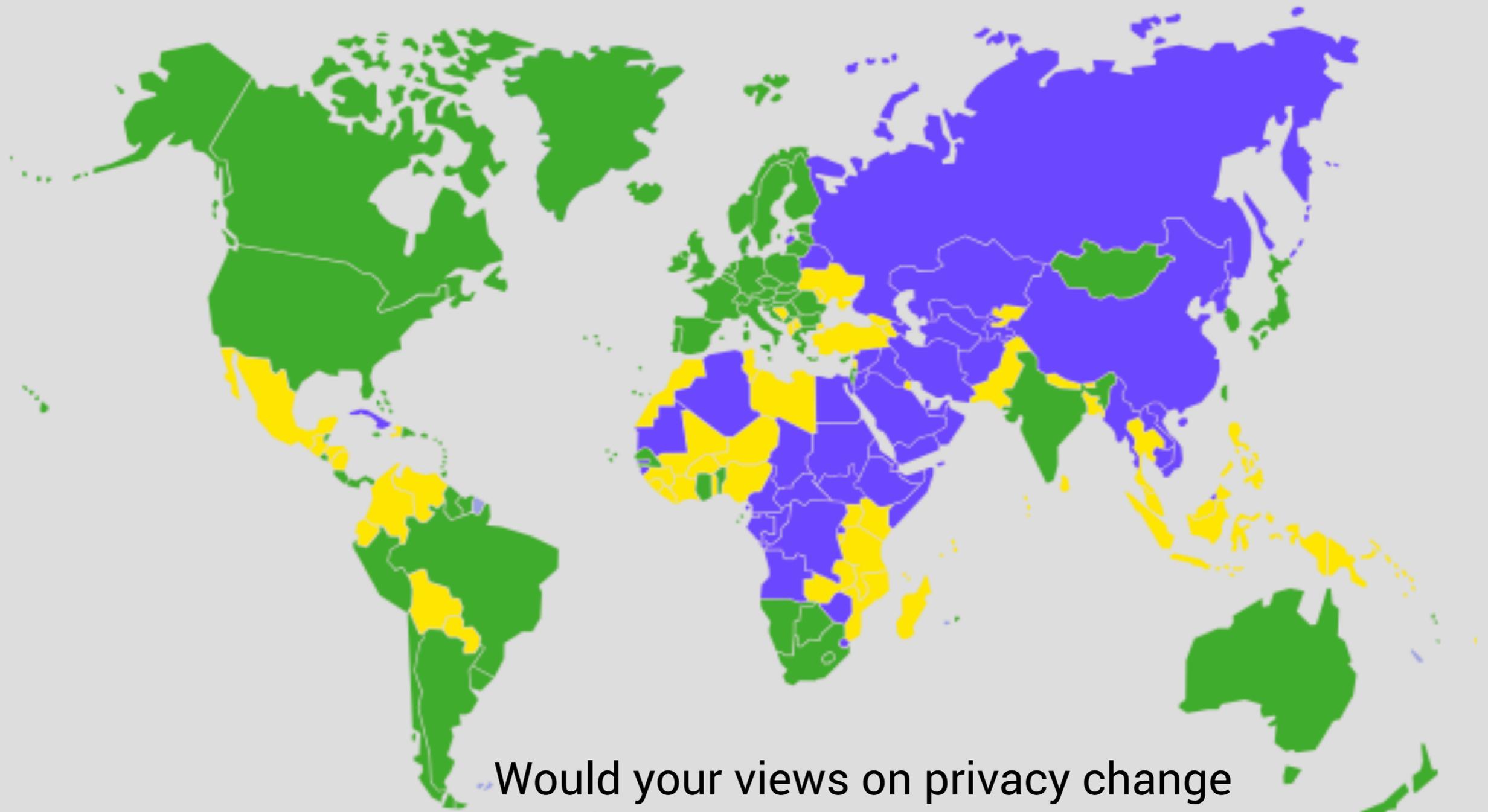
Sensor(s), actuator(s)

IoT Silo pros & cons

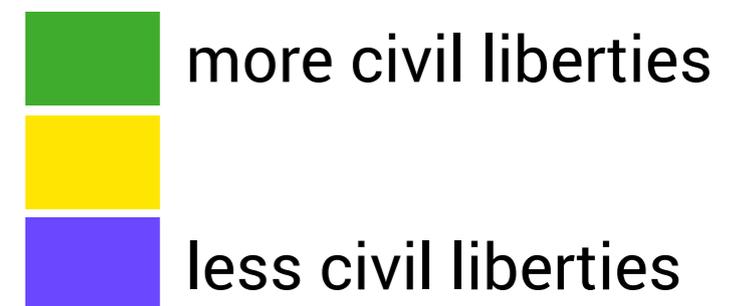
For vendor	For customer
Hosting & bandwidth costs -	Access over public internet +
Easy application updates +	Simple + Cannot disagree -
No money in devices ++	I'm overpaying - -
Can monetize my customer's data ++	I'm being spied on - -
I have a veto over who gets to connect to customer +	Need vendor permission to innovate and integrate - -
I can lock-in customer because I have their data ++	I'm being held hostage - -

Second-order effects

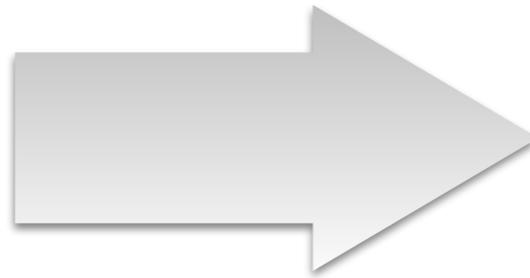
- 🔒 Locks out startups and innovation.
- 🔒 Your house will stop working when vendor goes out of business or changes strategy.
- 🔒 Nobody can tell whether your device has been hacked.
- 🔒 Governments can demand real-time access to your home without you knowing.



Would your views on privacy change if you lived somewhere else?



Customer
is king.



Big vendor
is the overlord.

Customer
is the subject.

Small vendor
is roadkill.

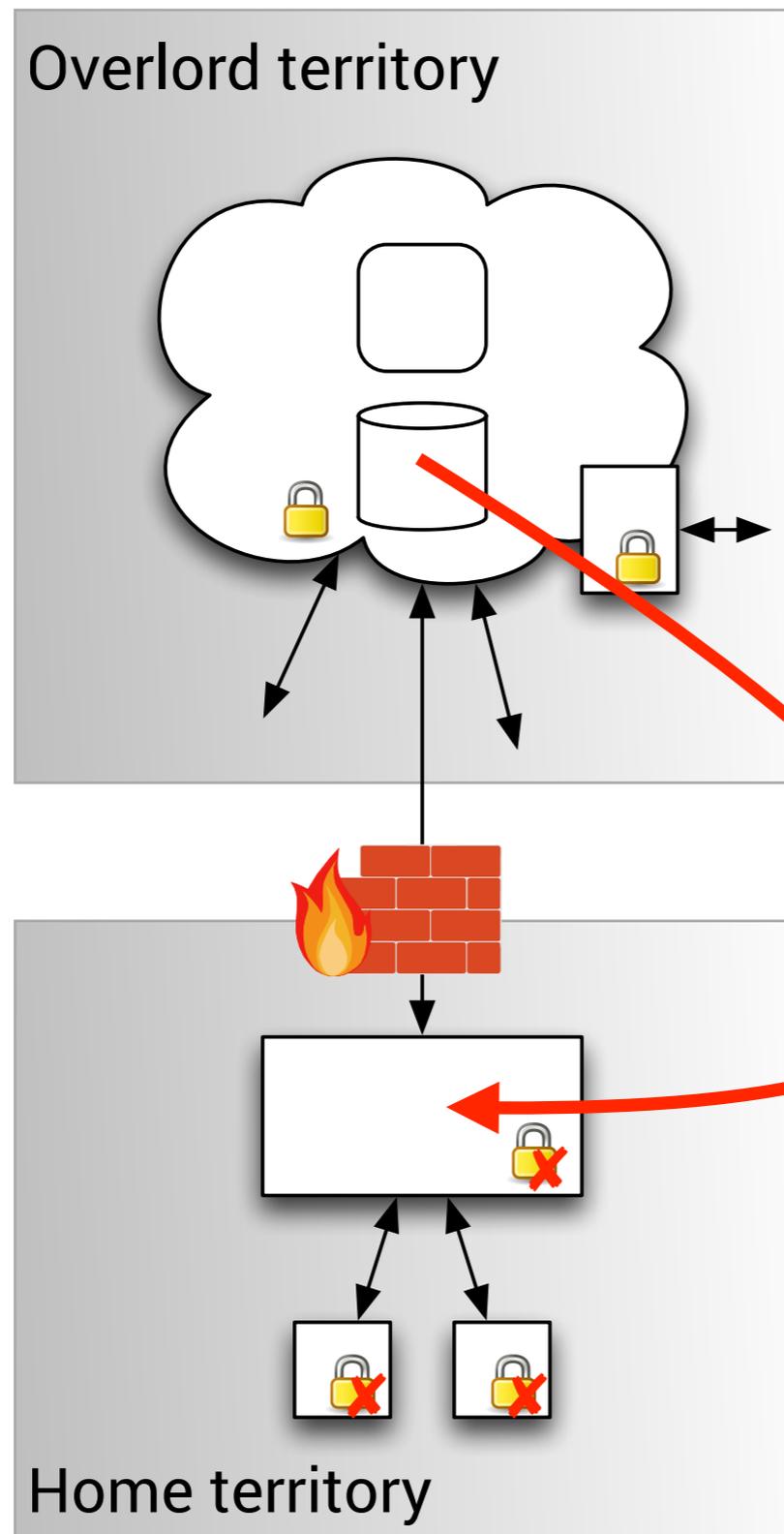
Aspects of control

Control over **terms of use**
and **access**

Control over **code**

Control over **data**

Fixing the overlord architecture



→ **Indie IoT
architecture**

2. Let the customer choose
where their data is stored

1. Unlock the customer's
devices



- 1 DONT RUN POOLSWEEP WITHOUT FILTER - or when using SPA
- 2 To brush clean - SPA TURN VALVE #1 TO SPA DRAIN - brush dirt INTO SPA Bottom drain.



slow

FILTER



SWEEP

LITER

MAIN FILTER / PUMP



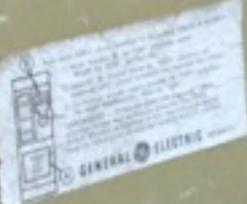
Heavy Duty Chemical Service
Central California Chemical Corp
Santa Clara County 248-8000
Alameda County 741-2200



BOOSTER PUMP
Don't run unless main pump is running!

POOLSWEEP WITHOUT
WHEN USING SPA

SPA
LEAN - TURN VALVE #1
RAIN - BRUSH DIRT INTO SPA



pool/rasptimer/

Rasptimer

Current status:

Main pump is:	off	<input type="button" value="Turn on"/>
Sweeper pump is:	off	<input type="button" value="Turn on"/>

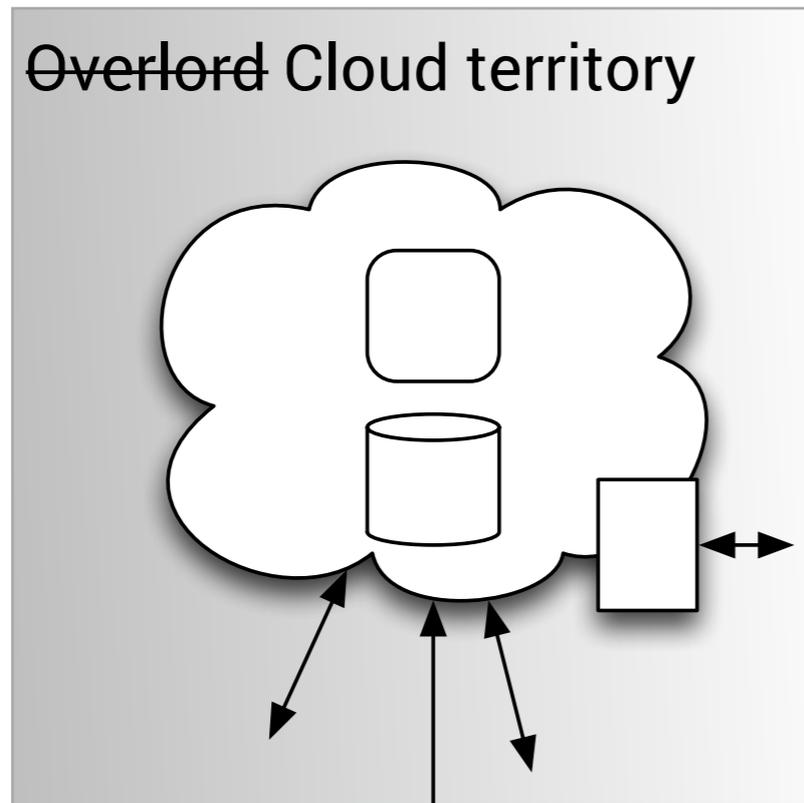
Rasptimer – Logs

[Front](#) [Logs](#) [Graphic logs](#)

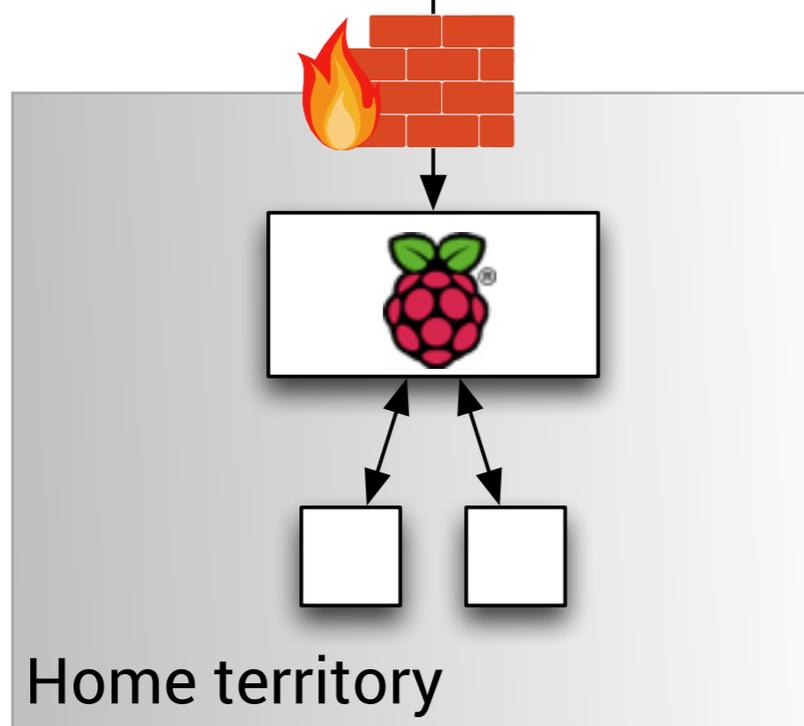
Day	Time																							
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2016-09-18								■	■	■	■													
2016-09-19								■	■	■	■													

Legend: Sweeper pump Main pump

Indie IoT Pool Controller



Choice of clouds
(Cloud optional)



Open-source Rasptimer app

UBOS Linux

Indie Computing Corp.

UBOS

- Linux for devices
- that run web apps

Management services

- Install / upgrades
- Backup / restore, DNS

Software development

- IoT & self-hosted web apps

Technology advisory

- IoT, Personal Clouds, NoSQL

Let's build the kinds of products
that we'd like to be buyers of.

Mailing list:
groups.io/g/indieiot

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