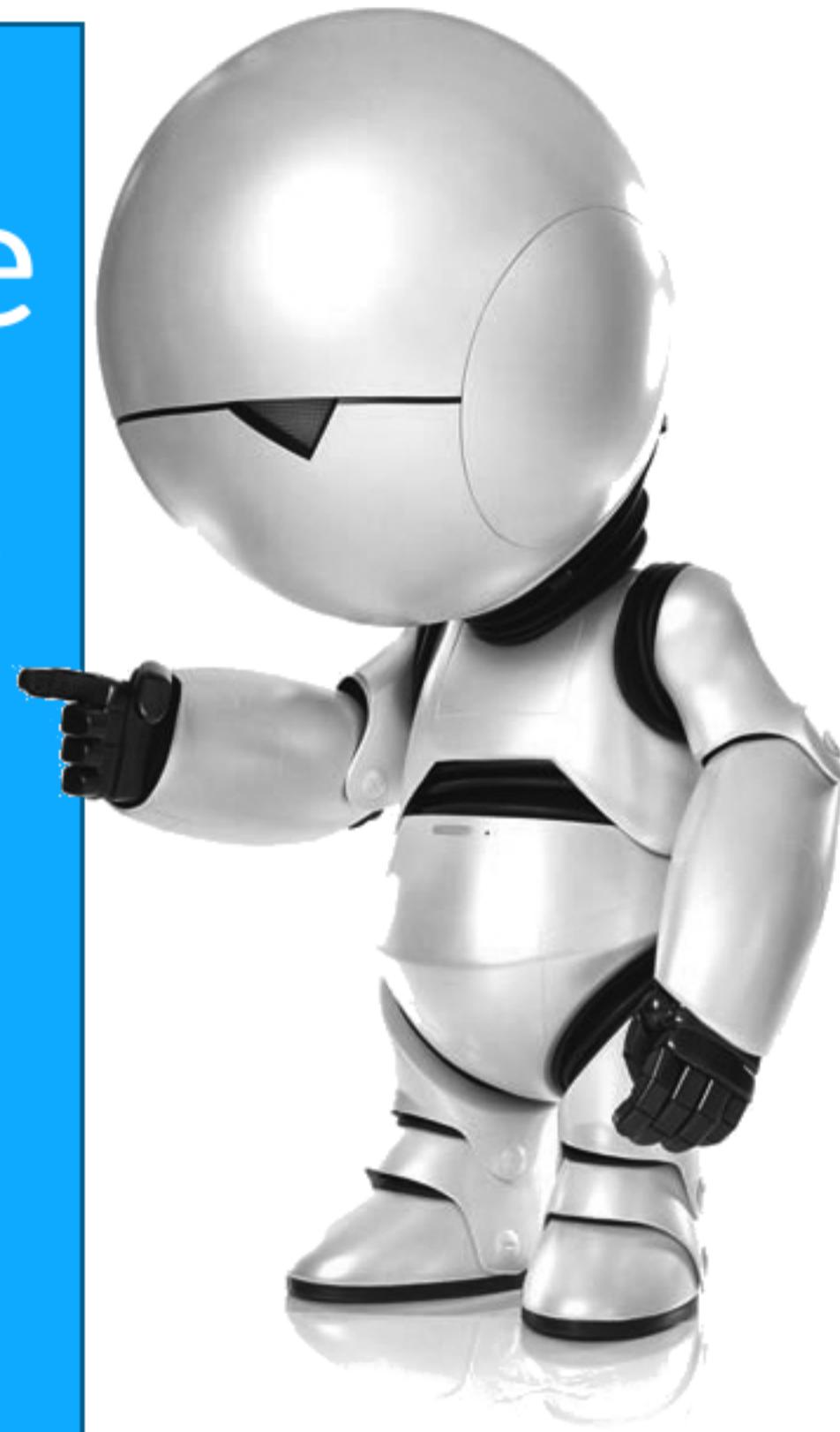


# CONTROL YOUR HOME WITH **PHP** (AND SOME OTHER TOOLS...)

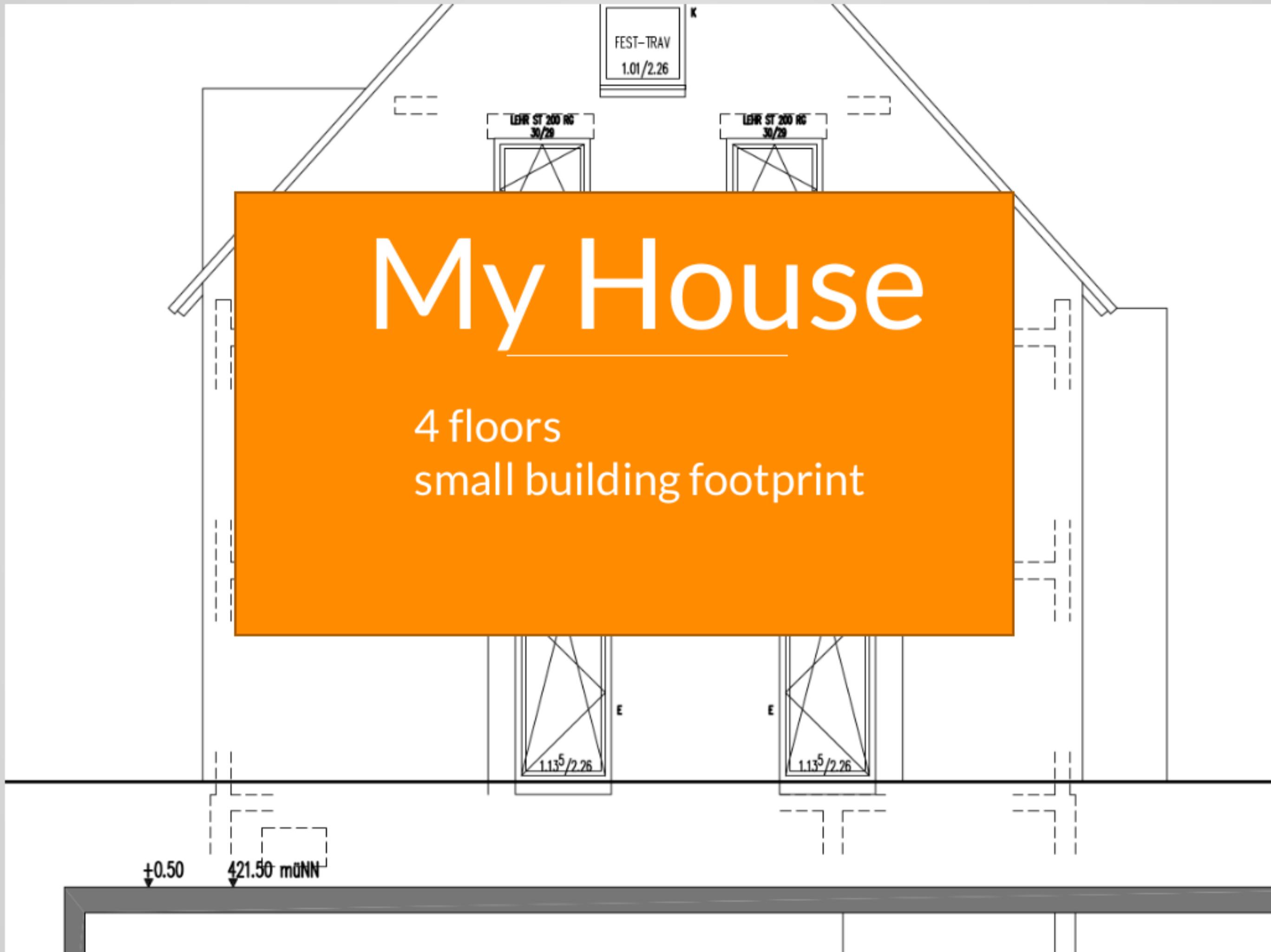


# Smart Home

Home Automation  
IoT



[http://de.mini.wikia.com/wiki/Datei:Roboter\\_marvin.jpg](http://de.mini.wikia.com/wiki/Datei:Roboter_marvin.jpg)



# Automation

Control Shutters  
from everywhere

Largest gadget  
I can think of



[http://pre04.deviantart.net/38f9/th/pre/i/2010/329/2/b/inspector\\_gadget\\_study\\_by\\_vdvector-d33k9db.jpg](http://pre04.deviantart.net/38f9/th/pre/i/2010/329/2/b/inspector_gadget_study_by_vdvector-d33k9db.jpg)

## **SMART HOME STARTERPAKET**

FÜR ZUHAUSE ODER BÜRO



# Automation?

# Smart?

<http://media.bestofmicro.com/Smart-Home-Kits-Security-Sicherheit-AV-Test-eSaver-iConnect-EUROiSTYLE-tapHome-Gigaset-Elements-REV-Ritter-iComfort->

dia.bestofmicro.com/Smart-  
Security-Sicherheit-AV-Test-  
nect-EUROjSTYLE-tapHome-  
ents-REV-Ritter-iComfort-  
me-Telekom-QIVICON-  
AX-/I-6-439998-22.jpg

maybe a nice toy

Automation?  
Smart?  
Remote?





maybe a nice ~

# Automation?

# Smart?

Demo at the G...

may

# Automation?

## Smart?

## Remote Swi

Smart-  
AV-Test-  
apHome-  
Comfort-  
ICON-  
-22.jpg

Collation:

Smart?

Remote Switch

(not talking about Nest or similar)

ch



An App is  
NOT  
the  
Holy Grail

<http://stormonkeys.tumblr.com/post/34299168675/screenshot-monty-python-and-the-holy-grail>

**"Automation**  
or automatic control,  
is the use of various control  
systems for operating  
equipment [...] with minimal or  
reduced human  
intervention. Some processes  
have been completely automated."



IP Gateway

- (Dimmed) Lights
- Wall sockets
- Shutters
- Heating

- no Client-Server
- Bus
- Sensors // Actors

Sensors and Actors  
(a Switch is not a switch anymore)

Switch / Sensor is intelligent and  
knows which actor to control

Program sensors/actors  
via a proprietary  
Windows Software  
called ETS (booo...)

- (Dimmed) Lights
- Wall sockets
- Shutters
- Heating

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- Bus
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Dimmered) Lights  
Wall sockets  
Shutters  
Heating

- no Client-Server
- Bus
- Sensors // Actors

Sensors and Actuators  
(a Switch is not an Actor)

Switch / Sensor  
knows which actor it is

Program sensor

-Server

/ Actors

## Sensors and Actors (a Switch is not a switch anymore)

Switch / Sensor is intelligent and  
knows which actor to control

Program sensors/actors

• • •

-Server

/ Actors

Sensors and Actors  
(a Switch is not a switch anymore)

**Switch / Sensor is intelligent and  
knows which actor to control**

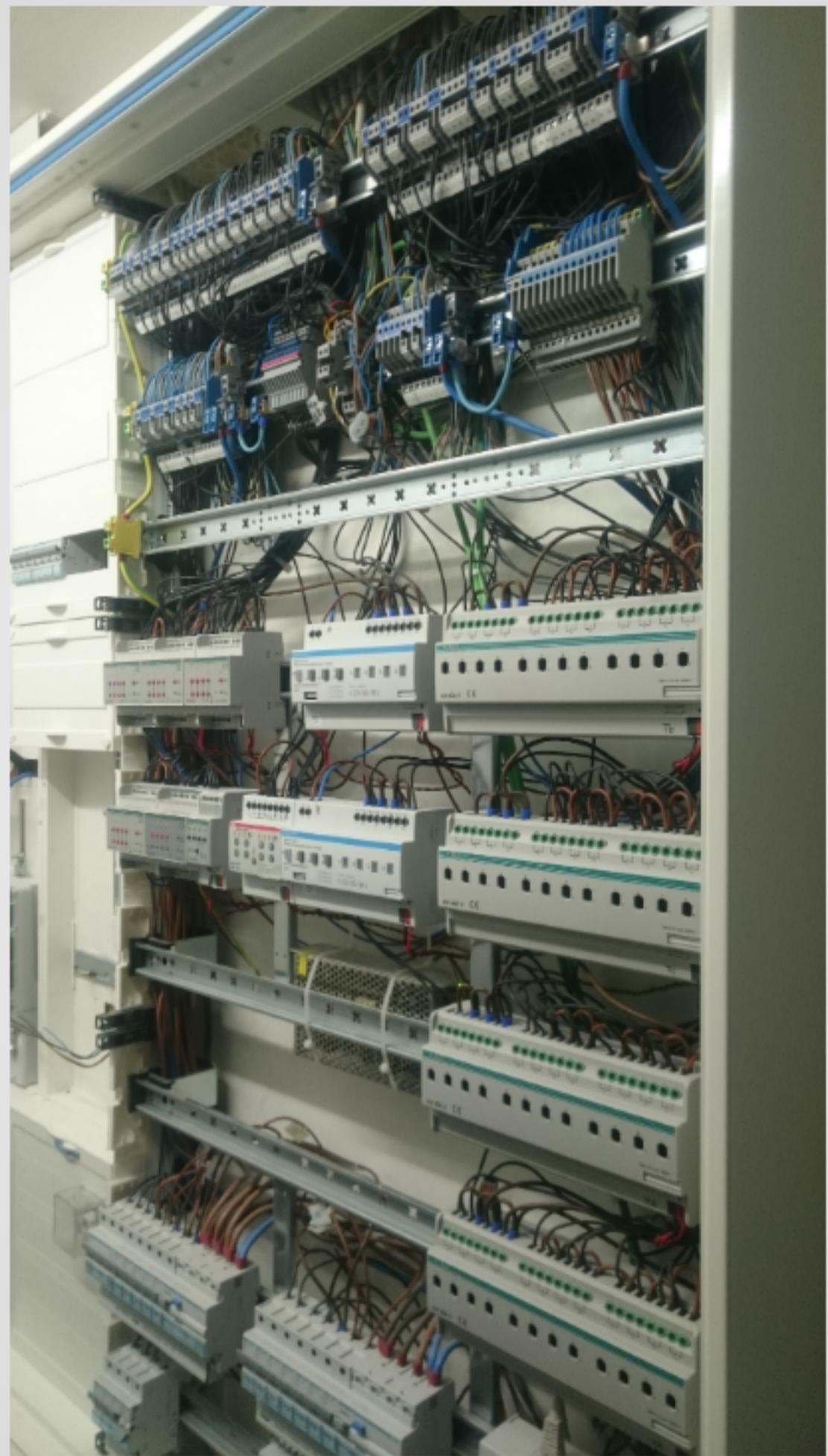
Program sensors/actors  
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Switch / Sensor is intelligent and knows which actor to control

Program sensors/actors via a proprietary Windows Software called ETS (booo...)

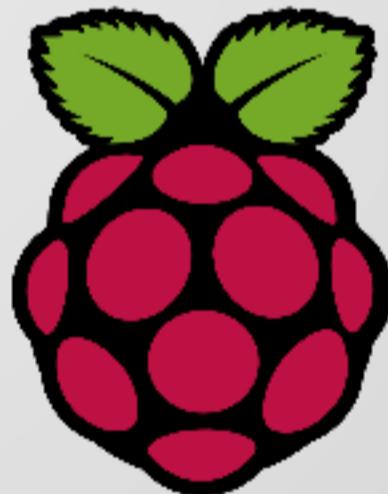


[http://img.archiexpo.de/images\\_ae/photos/kohlendioxidmelder-aufbau-aussenbereich-zur-beruflichen-nutzung-50417-8117093.jpg](http://img.archiexpo.de/images_ae/photos/kohlendioxidmelder-aufbau-aussenbereich-zur-beruflichen-nutzung-50417-8117093.jpg) / <http://ecx.images->

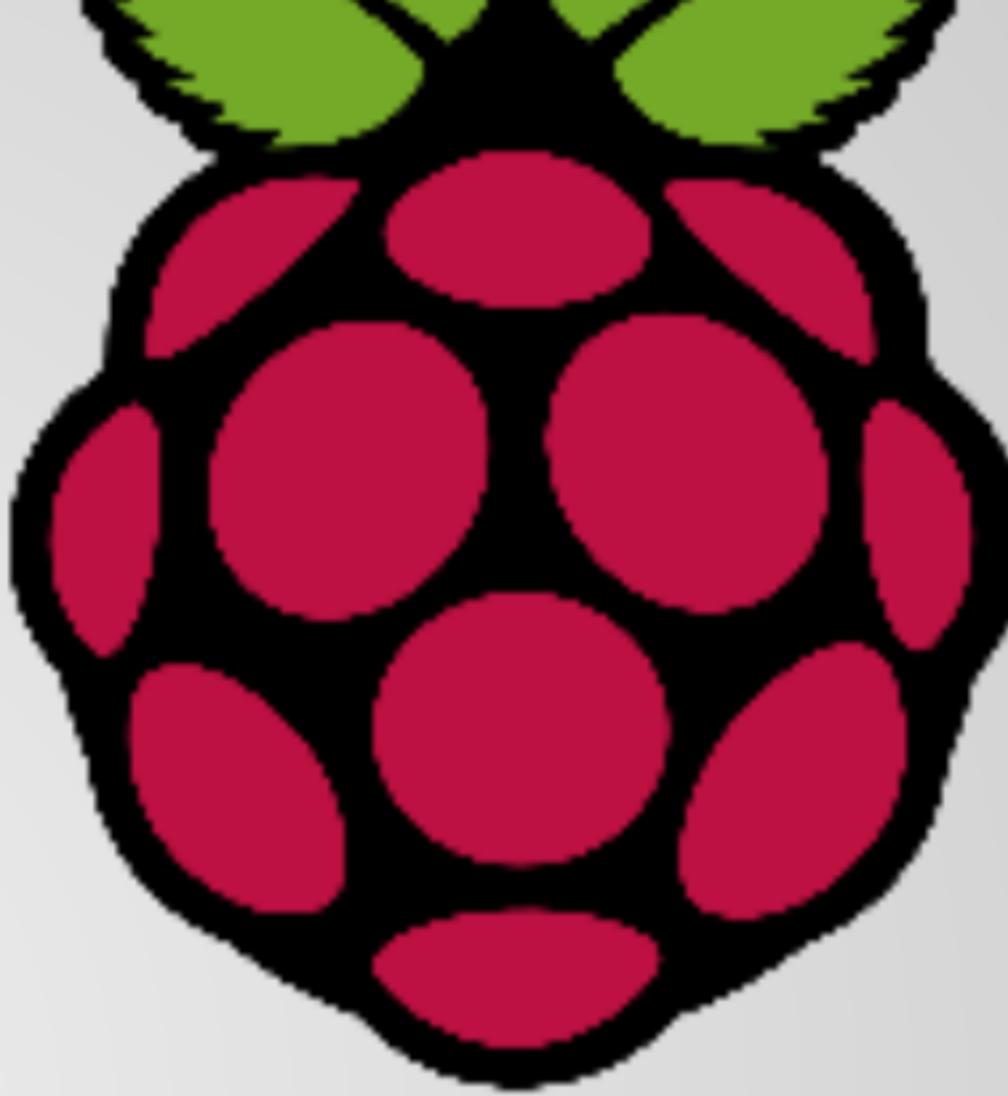


# IP Gateway

# OpenHAB



- Java
- App
- (Poor man's REST)
- connect to KNX
- Huge set of bindings available



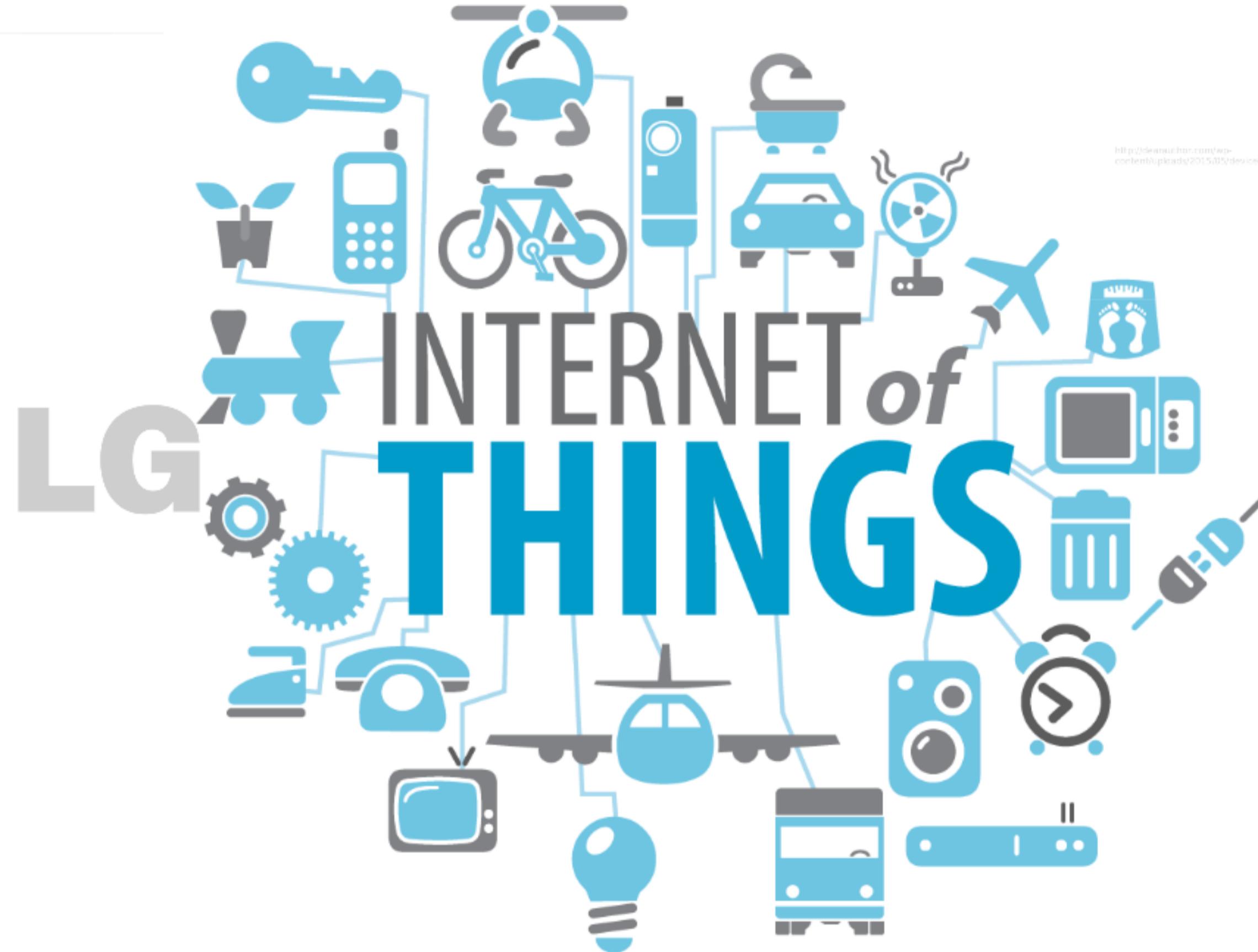
- Java
- App
- (Poor man's REST)
- connect to KNX
- Huge set of bindings available

connect to KNX

Huge set of bindings available

---

You can program, but...



<http://blog.open-xchange.com/2015/02/09/iot/>

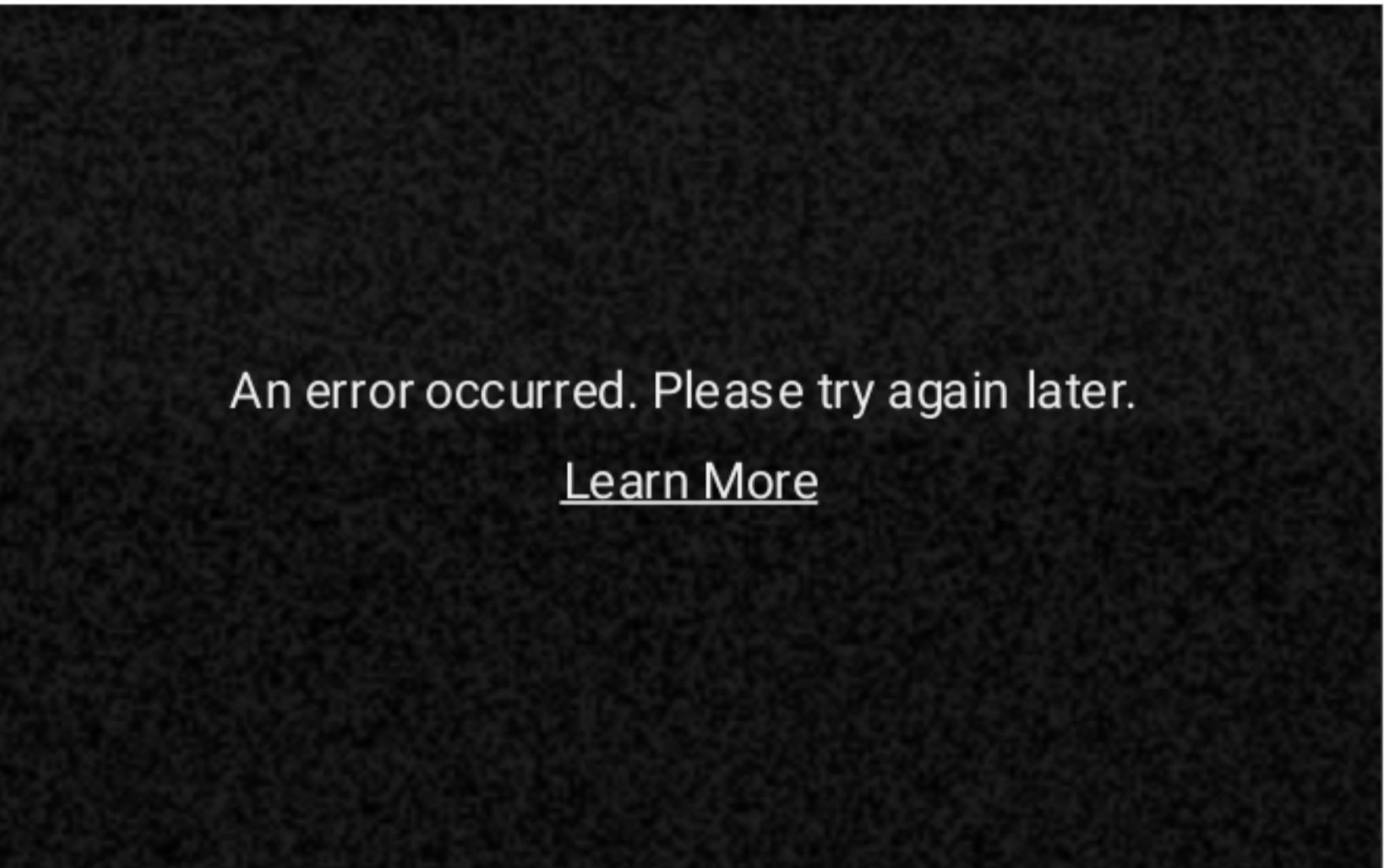


LG





[http://ecx.images-amazon.com/images/I/91X4fFC5cnL.\\_SL1500\\_.jpg](http://ecx.images-amazon.com/images/I/91X4fFC5cnL._SL1500_.jpg)



An error occurred. Please try again later.

[Learn More](#)

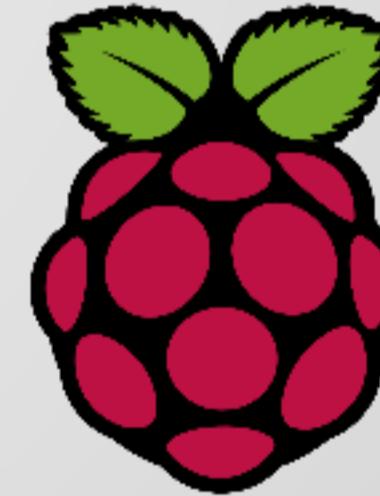


[http://dearauthor.com/wp-content/uploads/2015/05/deviceheroimg\\_1.jpg](http://dearauthor.com/wp-content/uploads/2015/05/deviceheroimg_1.jpg)



# REST



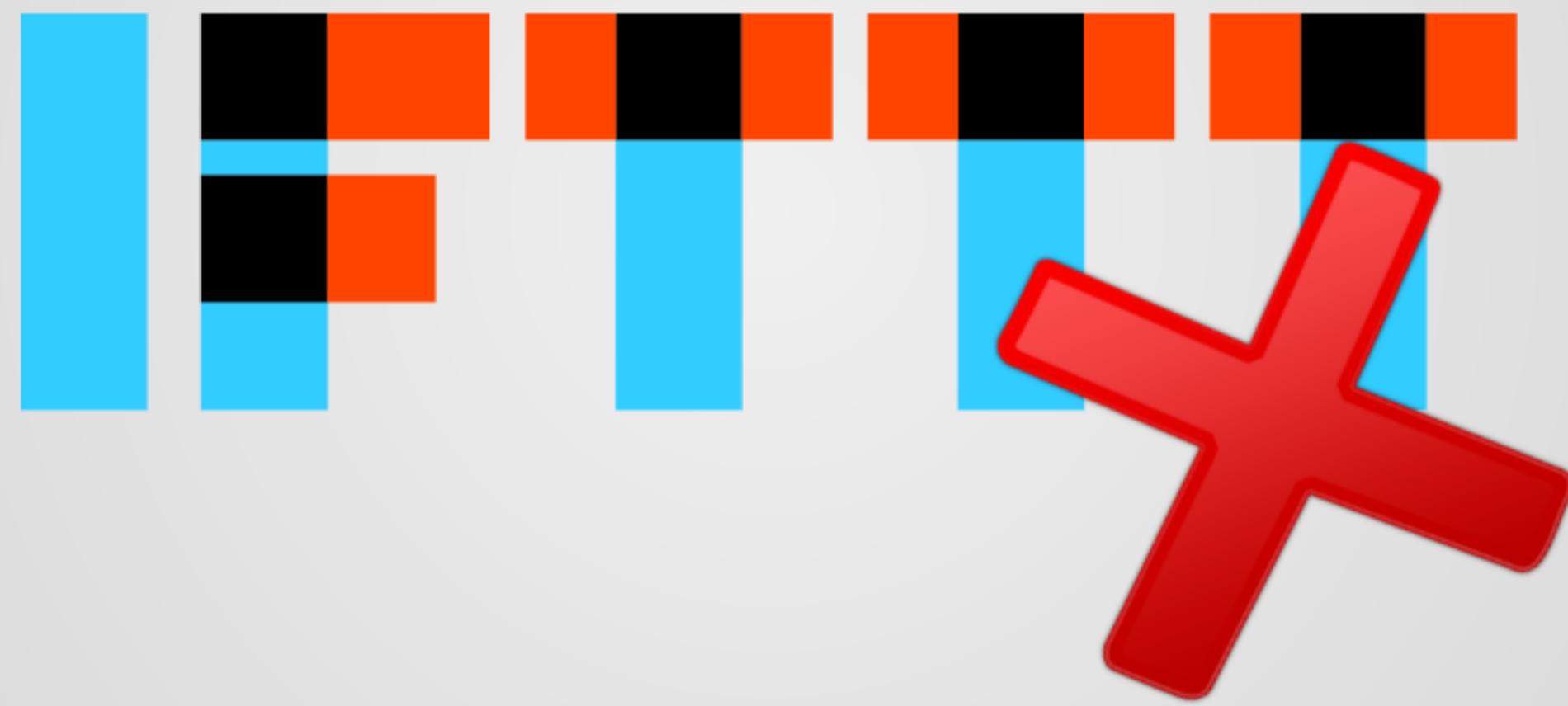


- Presence Detection via WiFi
- Presence Detection via Bluetooth
- Collect Data
- Let Nabaztag talk and blink
- ...

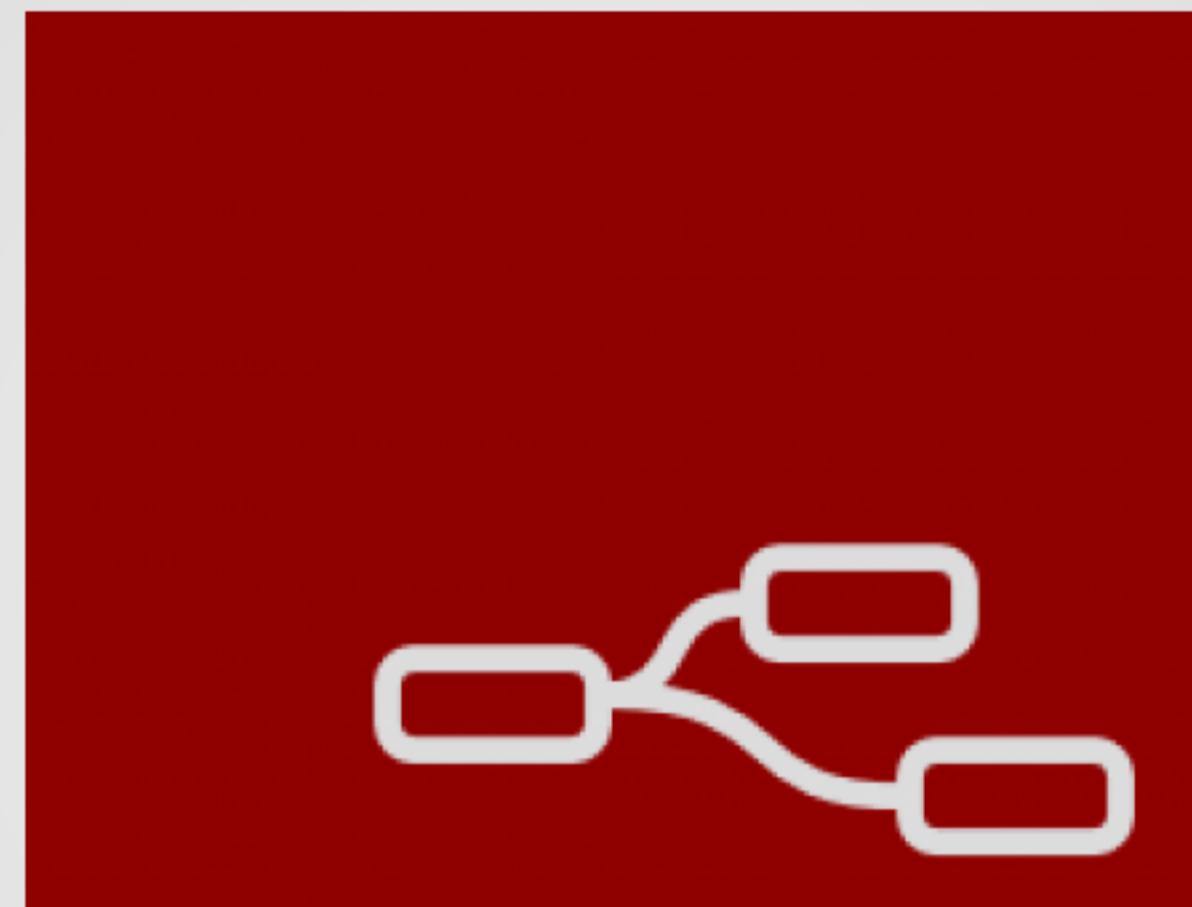
- Presence Detection via WiFi
- Presence Detection via Bluetooth
- Collect Data
- Let Nabaztag talk and blink
- ...

# Demo



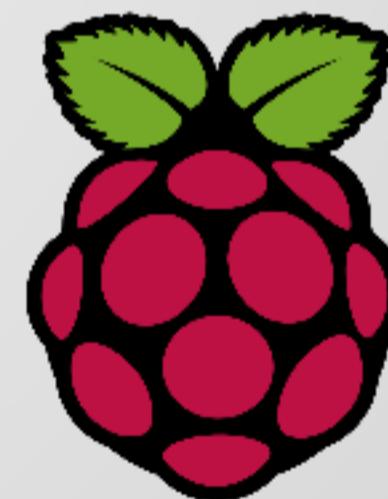


ic



# Node-RED

Flows // Sequences



- Presen
- Presen
- Colle
- Let N
- ...

Dem

# ROUTE-FIELD



## Flows // Sequences

If later than 1 hour after sunset  
and shutters are up then message  
to TV and Nabaztag.

If no manual interaction within the  
next 15 min shut down all Shutters

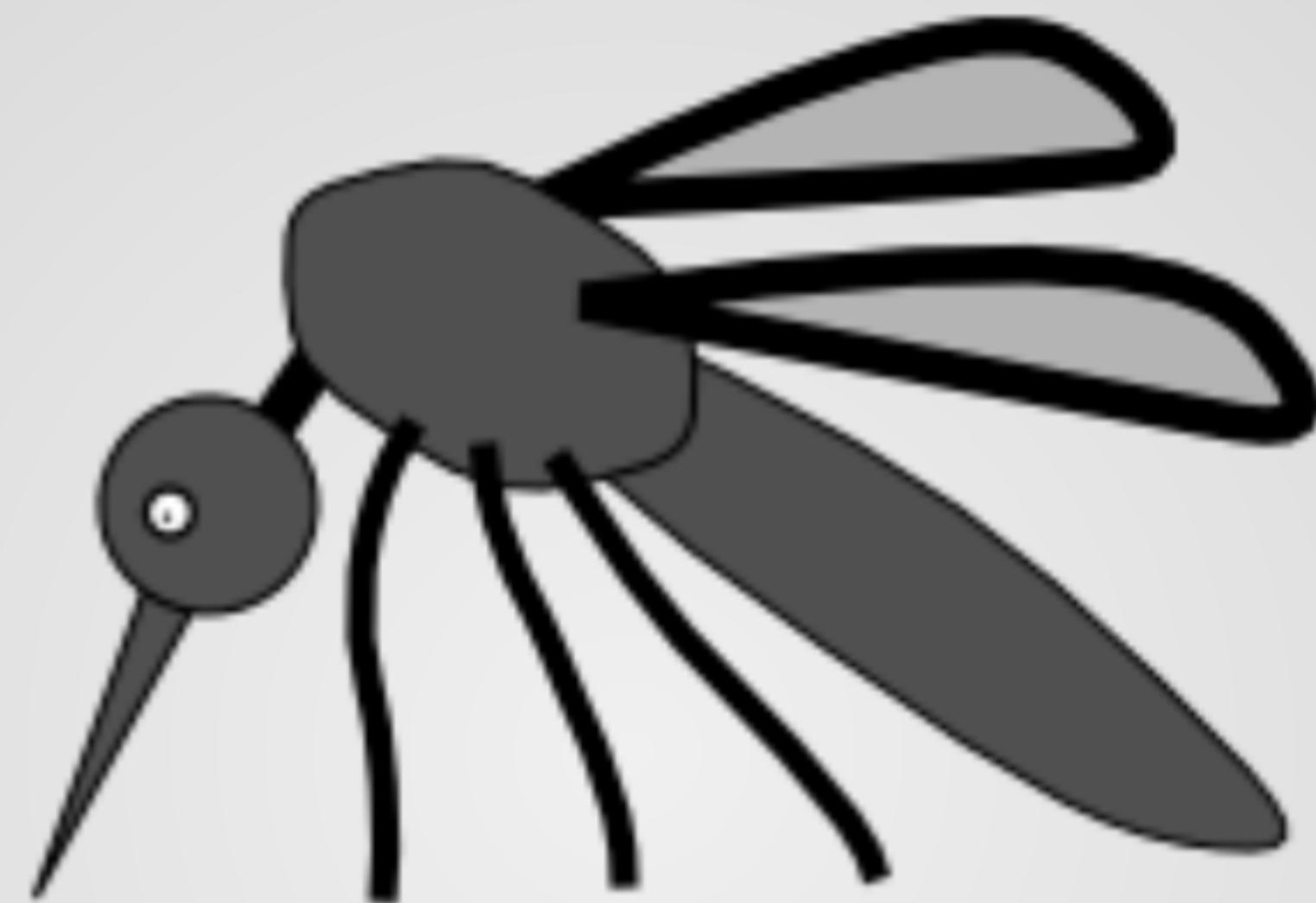
next 15 min shut down all Shutters

Turn on TV and  
start Netflix or Amazon or ...

# Burglar Alarm

Everybody left home  
and door to the terrace is open  
then msg to smart phones

Cup of Coffee in the morning  
(and a message if it's ready)



 MQTT.ORG

The logo consists of a small square icon containing three curved, overlapping bands of color transitioning from purple to light blue. To the right of the icon, the word "MQTT" is written in a bold, white, sans-serif font. A ".ORG" suffix is positioned at the bottom right of the "T".



ionic



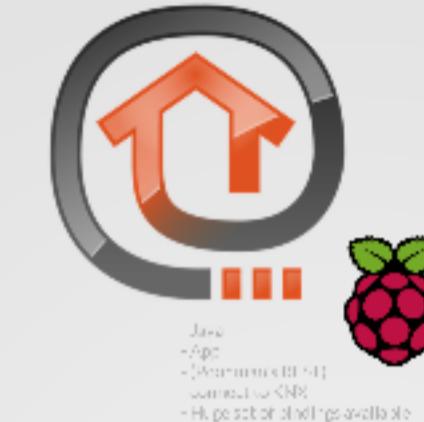
### Introducing short-term visitors

Autonation

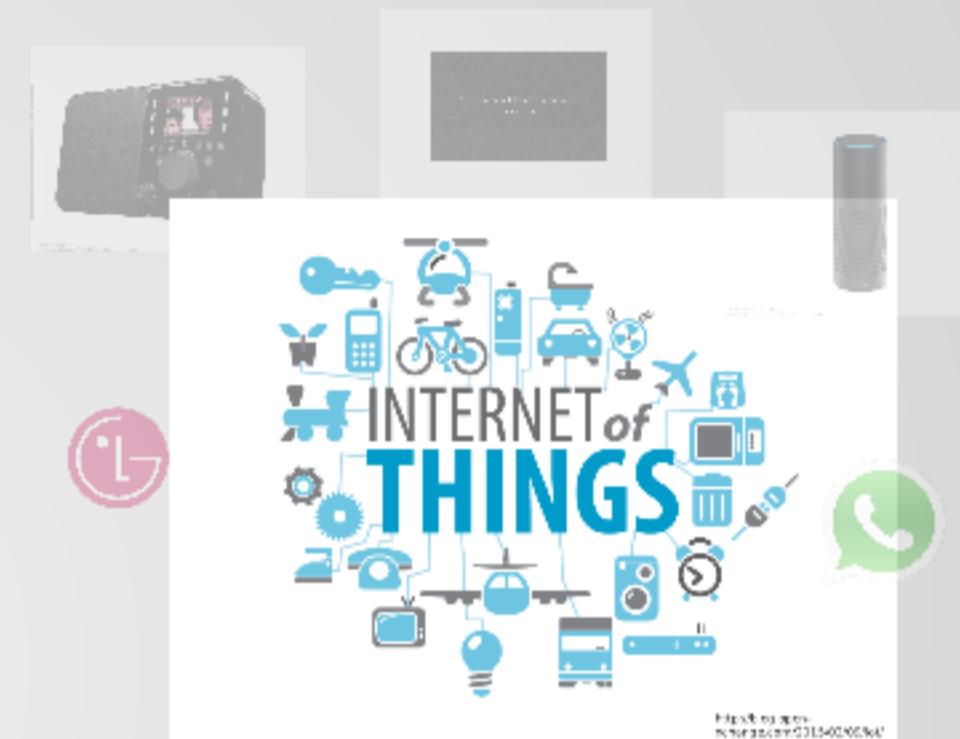
## Remote Switch

Participation  
of stakeholders  
in the use of various control  
systems is increasing.  
In addition [2] with minimum  
required financial  
intervention, some processes  
can be automated and controlled.

# Big Picture



You can program, bu

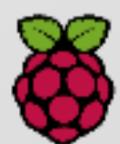
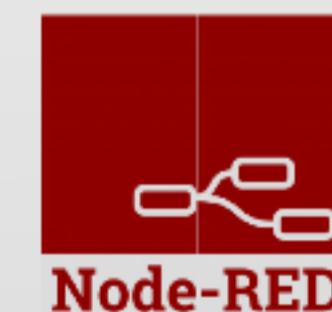


<input checked="" type="checkbox"/> Diamond	<input checked="" type="checkbox"/> Gold	<input checked="" type="checkbox"/> Silver	<input checked="" type="checkbox"/> Bronze
<input checked="" type="checkbox"/> Well-made	<input checked="" type="checkbox"/> 3.5	<input checked="" type="checkbox"/> Solid	<input checked="" type="checkbox"/> Not solid
<input checked="" type="checkbox"/> All fits	<input checked="" type="checkbox"/> Same size	<input checked="" type="checkbox"/> Same size	<input checked="" type="checkbox"/> Different sizes
<input checked="" type="checkbox"/> Nothing			

Programmatic  
Your property  
Your audience  
Local FTE (through)

| IP Gateways

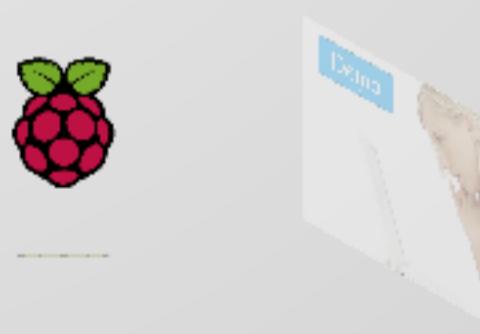
REST

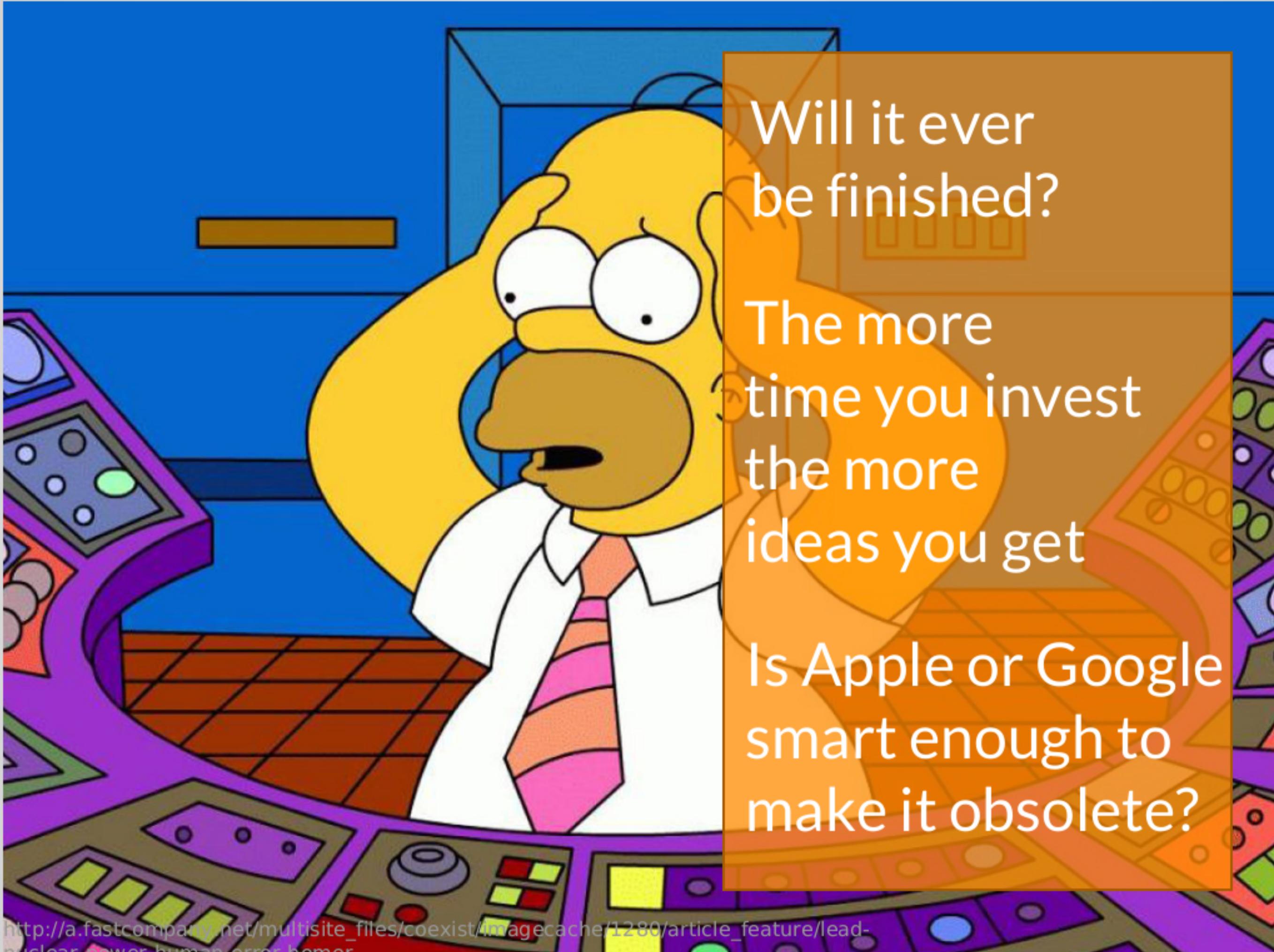


• 1996 by Cengage Learning



- Antecedent Detection via WSI
- Antecedent Selection via Statistical Collet Data
- List Noticing take note bina.





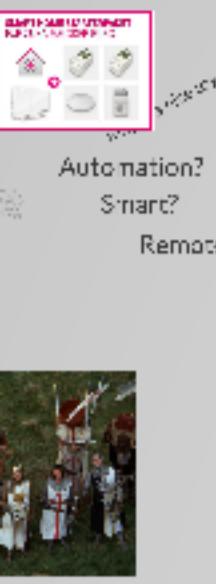
[http://a.fastcompany.net/multisite\\_files/coexist/imagecache/1280/article\\_feature/lead-nuclear-power-human-error-homer-simpson.jpg](http://a.fastcompany.net/multisite_files/coexist/imagecache/1280/article_feature/lead-nuclear-power-human-error-homer-simpson.jpg)



<http://i.huffpost.com/gen/2017938/images/o-SAMSUNG-VIRTUAL-REALITY-facebook.jpg>

# DANKE SCHÖN!

jan@zend.com



Installing about New in sim8!

Automation?

Smart?

Remote Switch

Automation  
• ability to control  
• create previous control  
• system can react  
• situation [e.g. when rain  
is used to turn  
off shower. Some processes  
can have multiple conditions.



- [Home] - IP
- Wall switch
- dimmer
- heating

• Client, Server, Services, Actions  
• J2EE  
• Sensors/Actuators

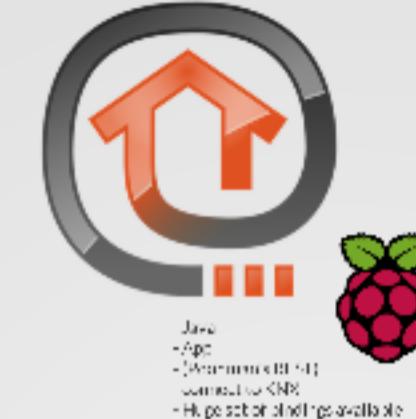
Switch/Encoder into IP and  
know which actor to control

Programmable  
via protocol  
Windows Software  
serial/ETH drivers



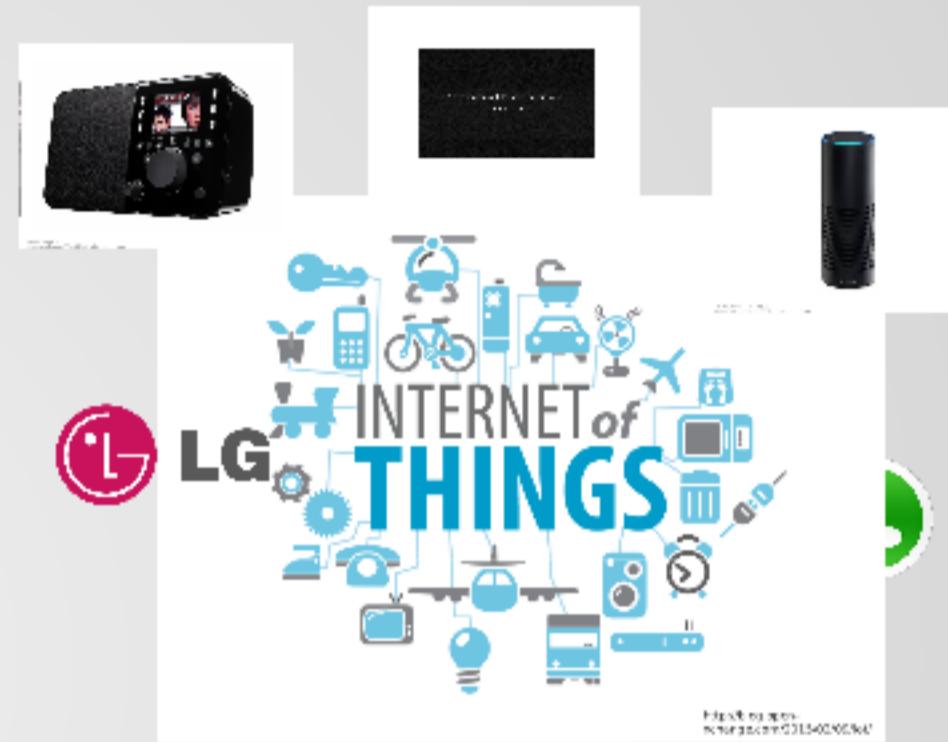
# Big Picture

## OpenHAB



Java  
- API  
- Minimum CEP 3.1  
- Command Line  
- REST API and Plugins available

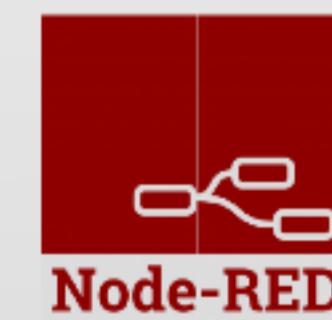
You can program, but...



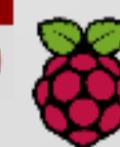
## REST



• Presence detection via WiFi  
• Presence detection via Bluetooth  
• Call Data  
• IoT Monitoring taking bin -  
etc



Flows & Sequences



Flows & Sequences