

Simple Home Assistant Server Can Make Your IT Life Better

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Technology Evangelist

Pure Storage

Level: Beginner

Session Survey

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Why Home Assistant?

- Vendor independence
- Multiple installation options
- Free software (hardware required)
- 4k+ integrations/blueprints/helpers
- Multiple protocols
- Community driven and supported
- Local and/or remote management



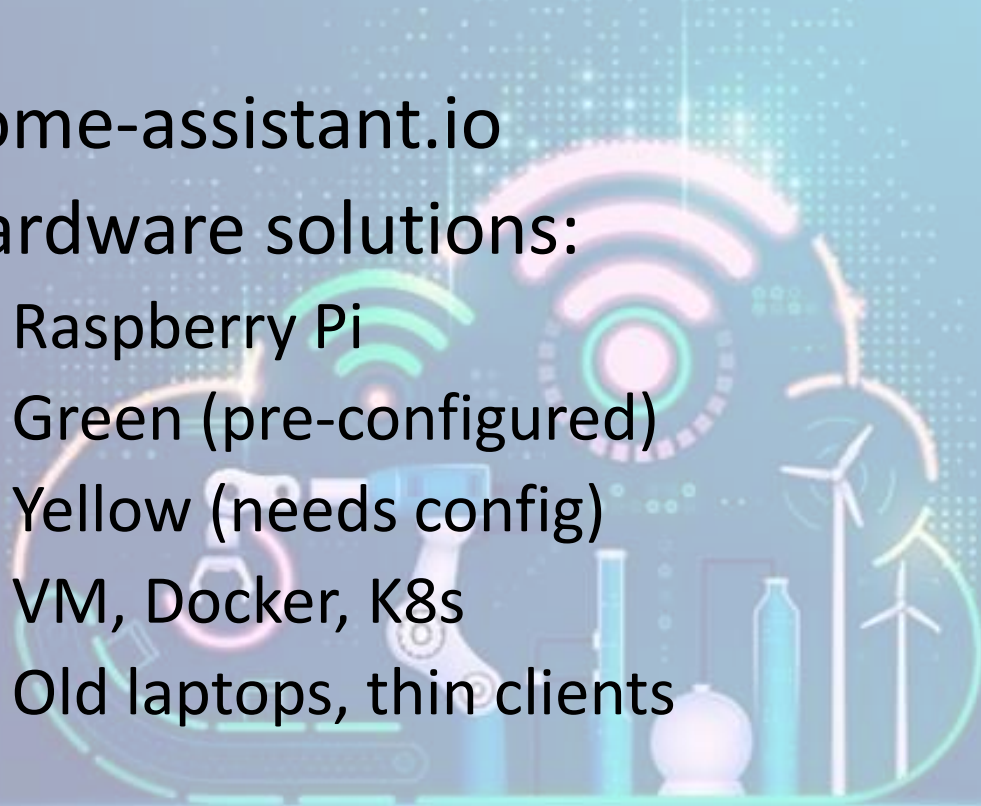
Let's see some telemetry

<https://analytics.home-assistant.io>



Hardware & Software

- home-assistant.io
- Hardware solutions:
 - Raspberry Pi
 - Green (pre-configured)
 - Yellow (needs config)
 - VM, Docker, K8s
 - Old laptops, thin clients



The brief deets on HASS

- Paulus Schoutsen in September 2013.
- It's python running on Home Assistant Operating System (aka. Linux)
- It's HA Core + HA Supervisor
- It's running Docker
- It's brains are SQLite
- History is kept for 10 days
- It can be viewed/managed remotely via Nabu Casa (\$) or VPN

1st Project.

Office busy light



Credit: Scott Hanselman 2012

8:24



Home Assistant

Joe Zimmerman · 50m ·



Now that my mailbox has Ethernet, what should I put in here? I was thinking a POE esp32 with a door sensor minimum. Looking for better ideas. — 🤔 looking for ideas.



👍👎❤️ 65

110 comments



Like



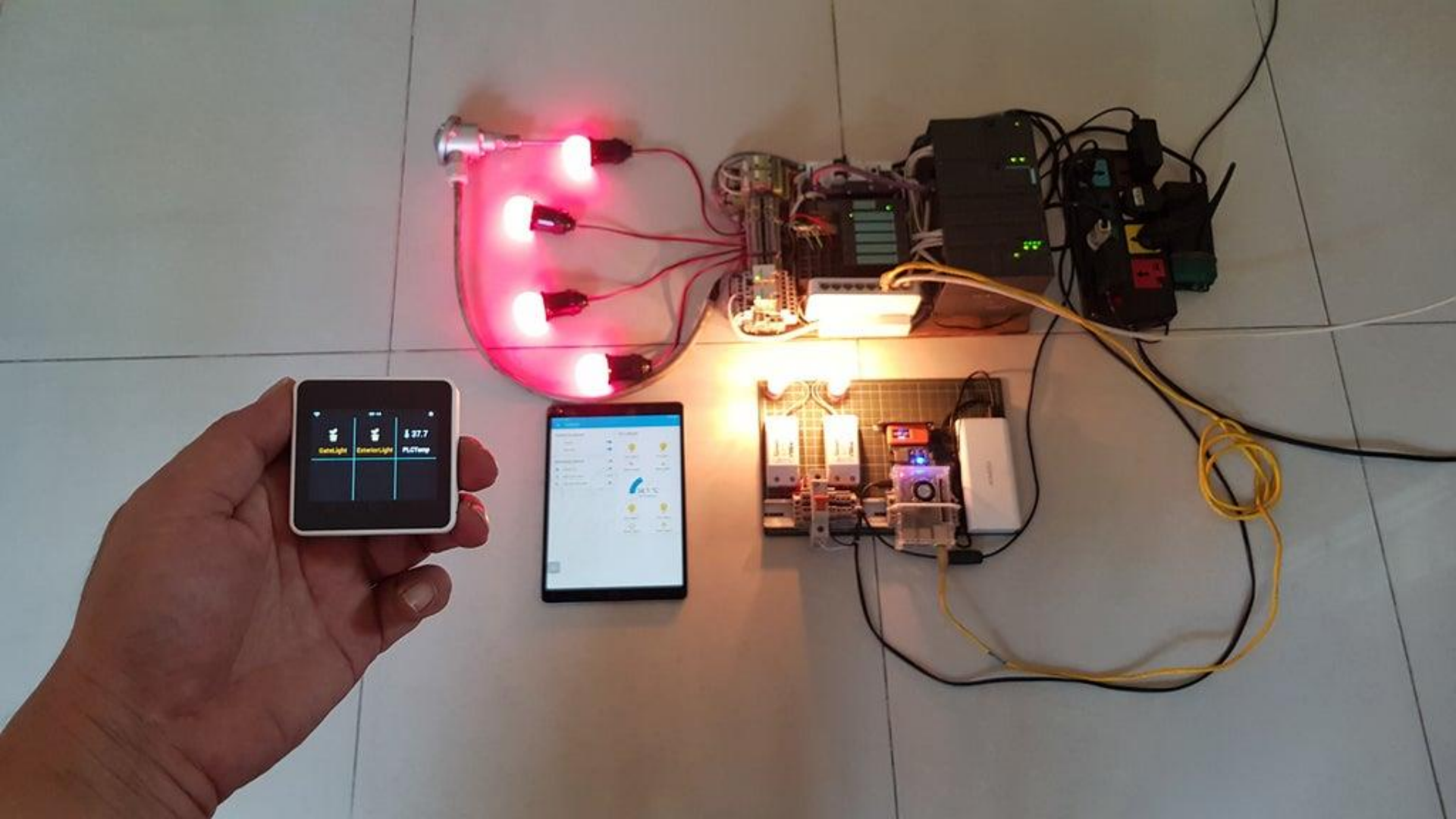
Comment



Send



Share



22 Oct 2022
16:36¹⁰



Calendar



Chores



System



Alarm



Rainy
Bicester

16 °C
77 %

19:00



15°

22:00



14°

1:00



14°

4:00



14°

7:00



14°



Indoor temp



Climate



Energy



Automations



Top 5 Devices Currently Running



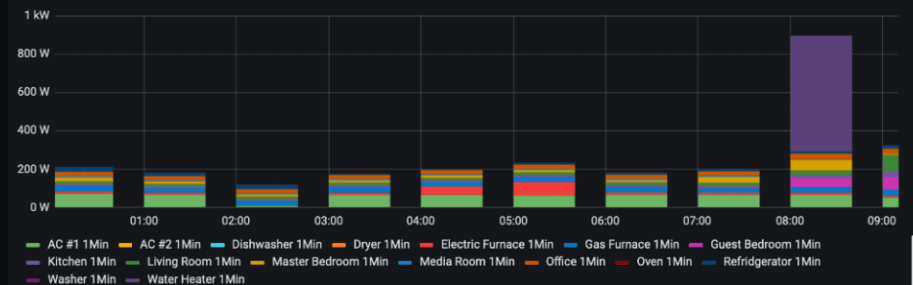
Current Day Power Total

11.1 kWh

Current Day Power Cost

\$1.07

Hourly Power by Device



Last 7 days Power Usage

Last 7 days



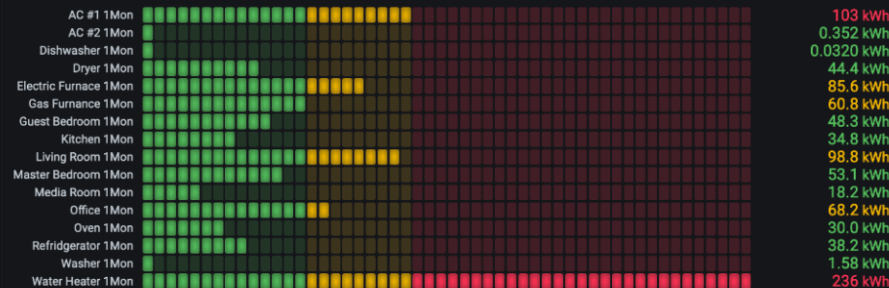
Current Month Total Power Usage

940 kWh

Current Month Bill

\$109.24

Month Power Total



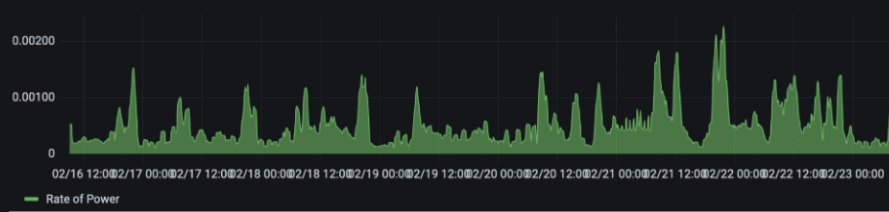
Top 5 Devices Last Week

Last 7 days







Power Spikes This Week




Last 7 days



Danny-PC

	CPUload	10.11 %
	LastBoot	4 days ago
	LockWorkstation	<input type="checkbox"/>
	MicActive	Off
	GPULoad	53 %
	ActiveWindow	Overview - Home Assistant - Google Chrome

Home Assistant

	Last boot	4 days ago
	Disk use (percent) /config	30.2 %
	Memory free	1,167.1 MiB

Router



Danny-Docker



Danny-Server

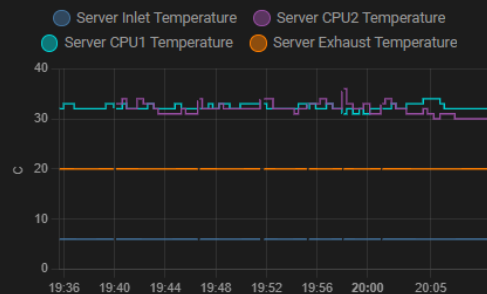


	Danny-Docker	Connected
	Danny-Server	Connected
	Router	Connected

Dell Server

⚡	Server Power	126 W
🌡️	Server Inlet Temperature	6.0 C
🌡️	Server Exhaust Temperature	20.0 C
🌡️	Server CPU1 Temperature	33.0 C
🌡️	Server CPU2 Temperature	30.0 C
🌀	Server Fans Speed Avg	3,220 RPM

Thermals 24 Hours



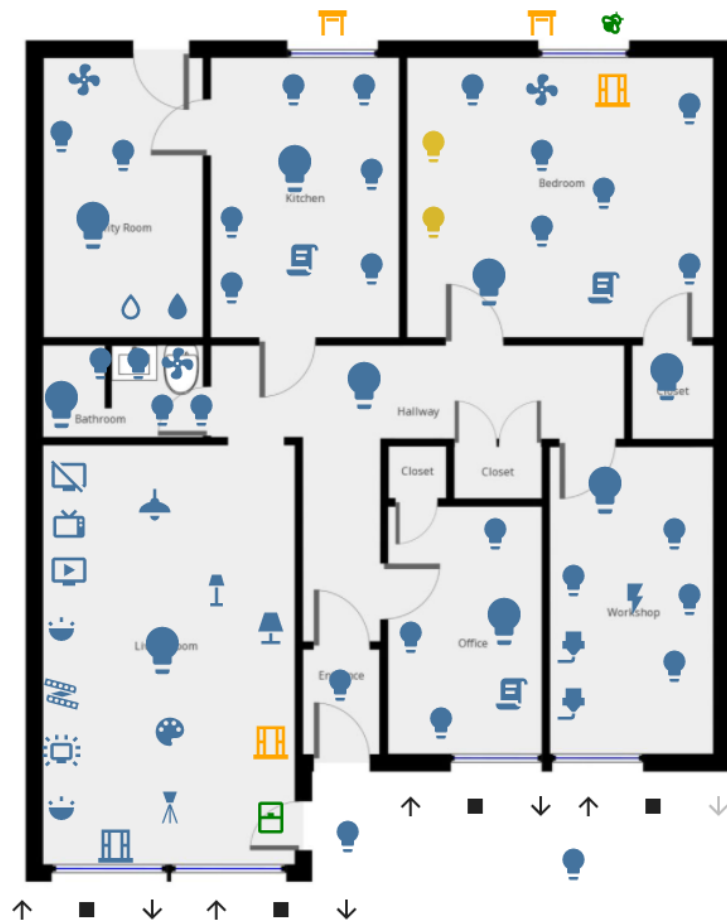
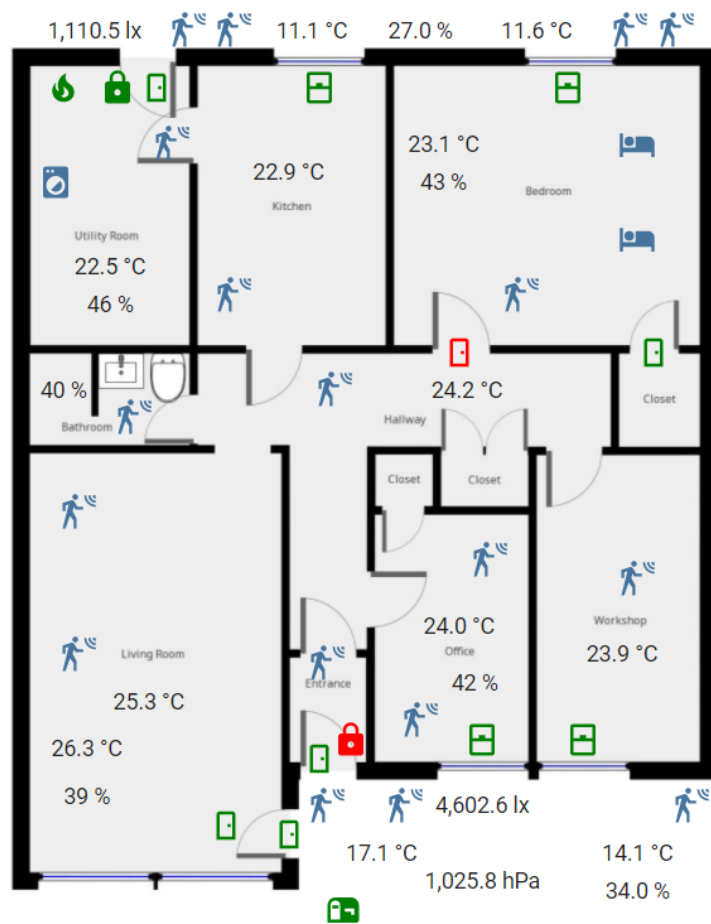
Power 24 Hours





TEST

TEST2



Config files

automation:

- alias: Turn on Entry Lights When Motion Detected

trigger:

- platform: state
entity_id: binary_sensor.foyer_motion
to: 'on'

condition:

- condition: state
entity_id: sun.sun
state: 'below_horizon'

action:

- service: light.turn_on
target:
entity_id: light.foyer



Config files

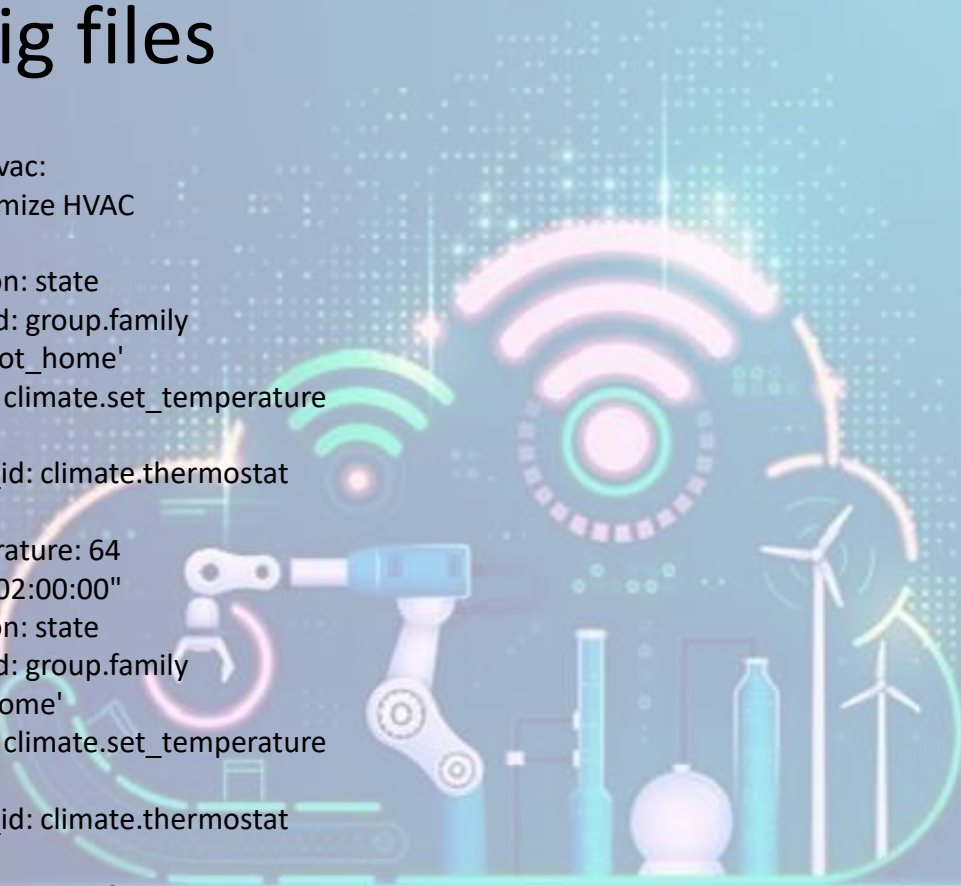
script:

optimize_hvac:

alias: Optimize HVAC

sequence:

- condition: state
 - entity_id: group.family
 - state: 'not_home'
- service: climate.set_temperature
 - target:
 - entity_id: climate.thermostat
 - data:
 - temperature: 64
- delay: "02:00:00"
- condition: state
 - entity_id: group.family
 - state: 'home'
- service: climate.set_temperature
 - target:
 - entity_id: climate.thermostat
 - data:
 - temperature: 72



Selling it to the SpHouse

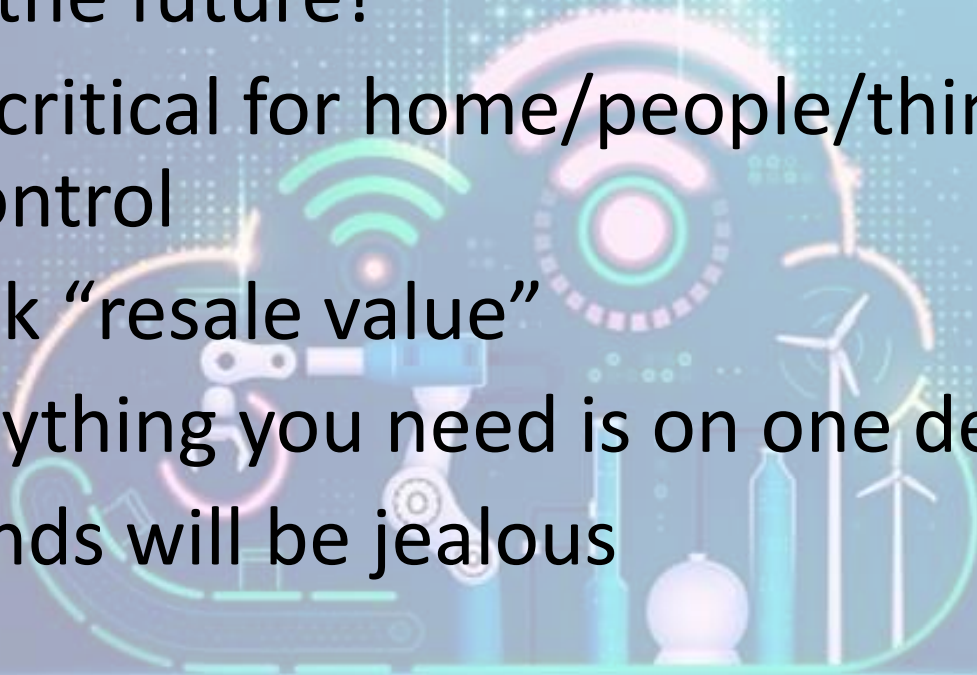
It is the future!

It is critical for home/people/thing management
& control

Think “resale value”

Everything you need is on one device

Friends will be jealous



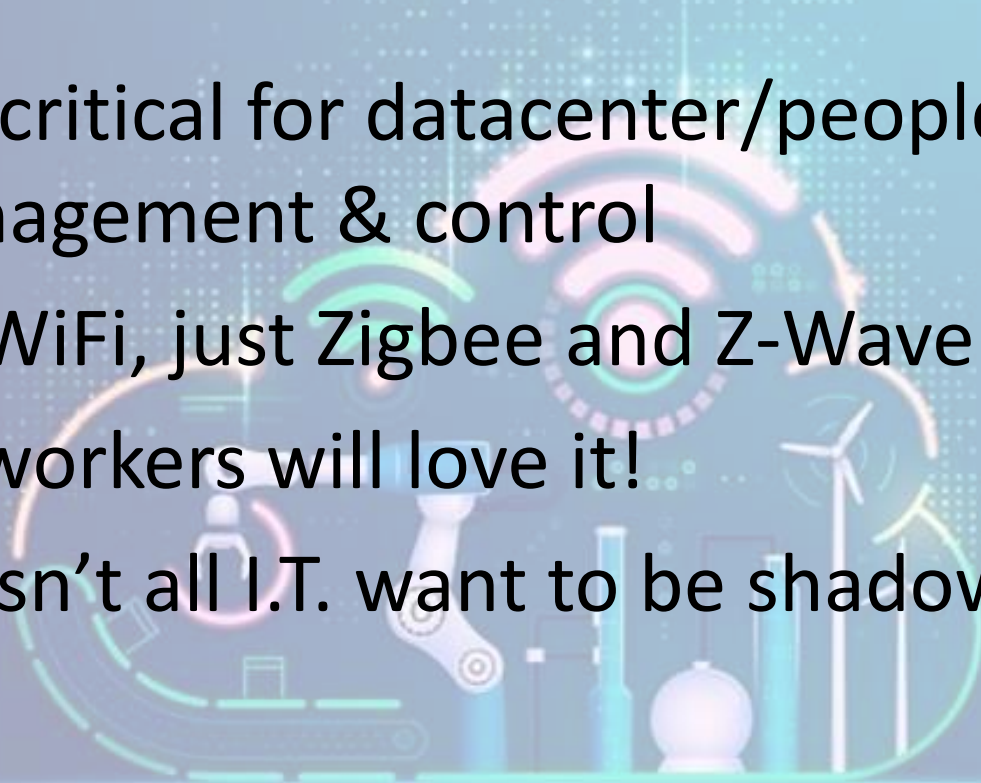
Selling it to the Boss

It is critical for datacenter/people/thing
management & control

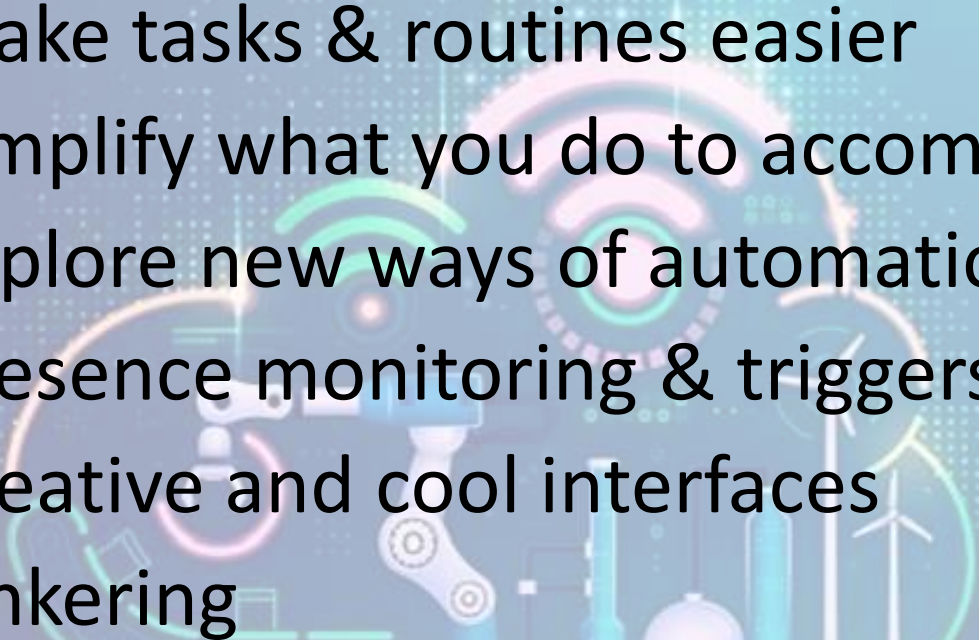
No WiFi, just Zigbee and Z-Wave

Co-workers will love it!

Doesn't all I.T. want to be shadow-security?



How will this help my life??

- Make tasks & routines easier
 - Simplify what you do to accomplish X, & Y, & Z
 - Explore new ways of automation
 - Presence monitoring & triggers are way cool
 - Creative and cool interfaces
 - Tinkering
- 

How will this help me in I.T.??

- Automations, monitoring, & alerting of
 - Datacenter infrastructure
 - Desktops, servers, apps
 - Things (IoT)
 - People
- Impress your boss, peers, & the Bob's



The Process

- Plan your plan
- Install
- Config the basics
- Integrations & blueprints
- Dashboards → Last



Let's see a couple of demos

<https://home-assistant.io/integrations/demo/>



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