

# 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

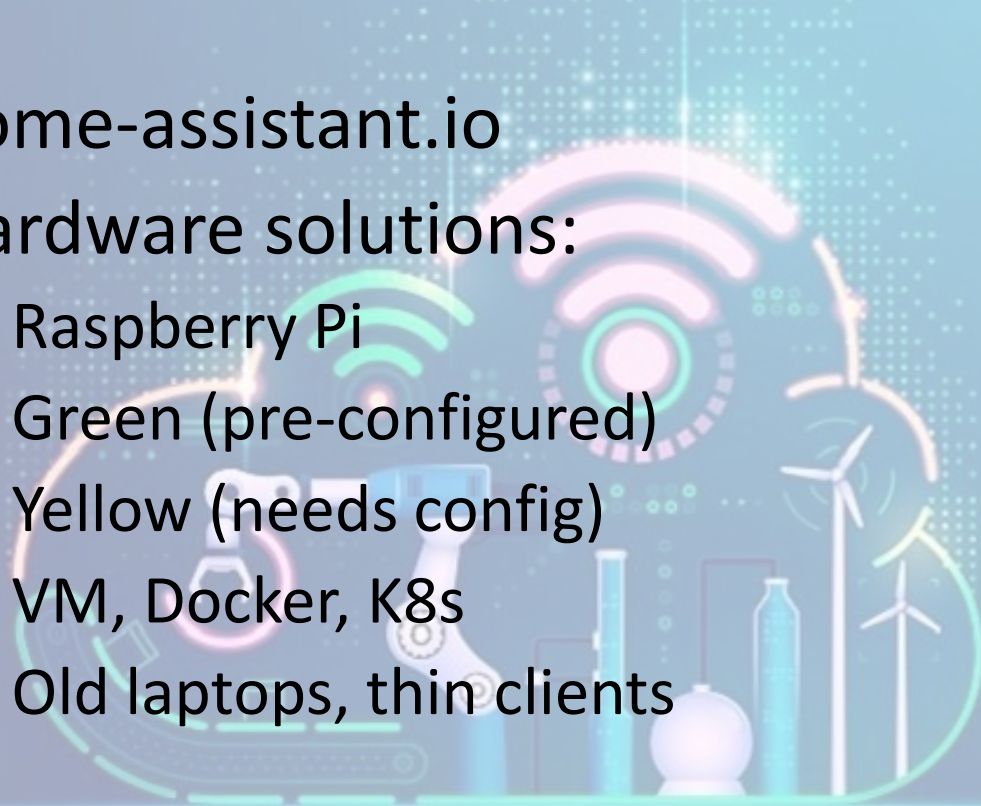
<https://analytics.home-assistant.io>





# Hardware & Software

- [home-assistant.io](https://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

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  
16:36<sup>10</sup>



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



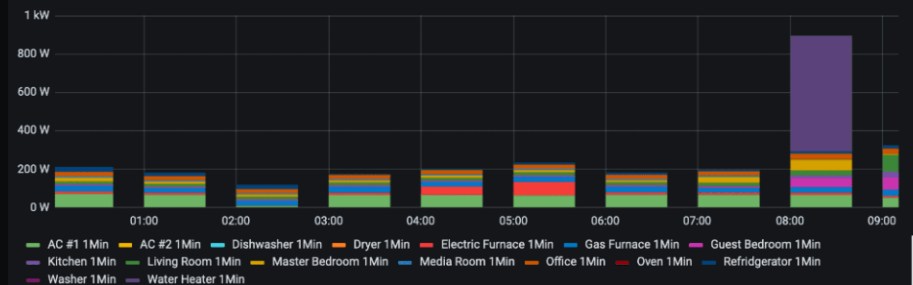
### Current Day Power Total

11.1 kWh

### Current Day Power Cost

\$1.07

### Hourly Power by Device



### Last 7 days Power Usage

Last 7 days



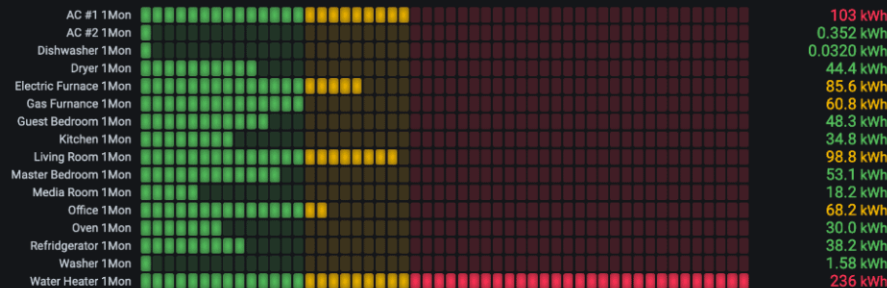
### Current Month Total Power Usage

940 kWh

### Current Month Bill

\$109.24

### Month Power Total



### Top 5 Devices Last Week

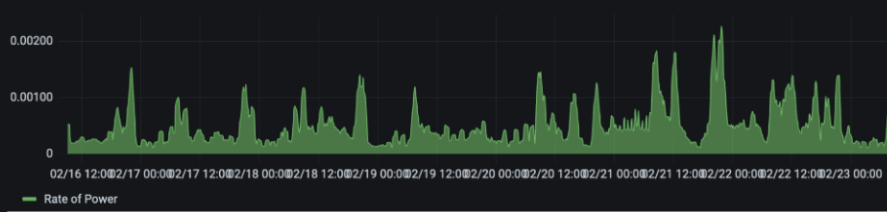
Last 7 days



Device	Power Usage
Water Heater 1D	79 kWh
Electric Furnace 1D	37 kWh
AC #1 1D	34 kWh
Living Room 1D	32 kWh
Office 1D	21 kWh

### 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

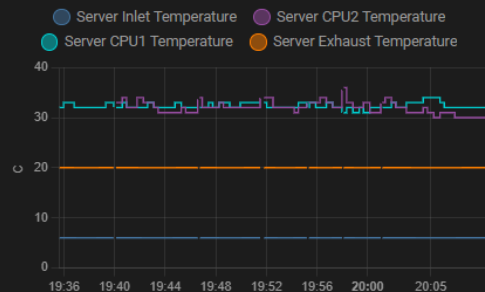


	Danny-Docker	Connected
	Danny-Server	Connected
	Router	Connected

## 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

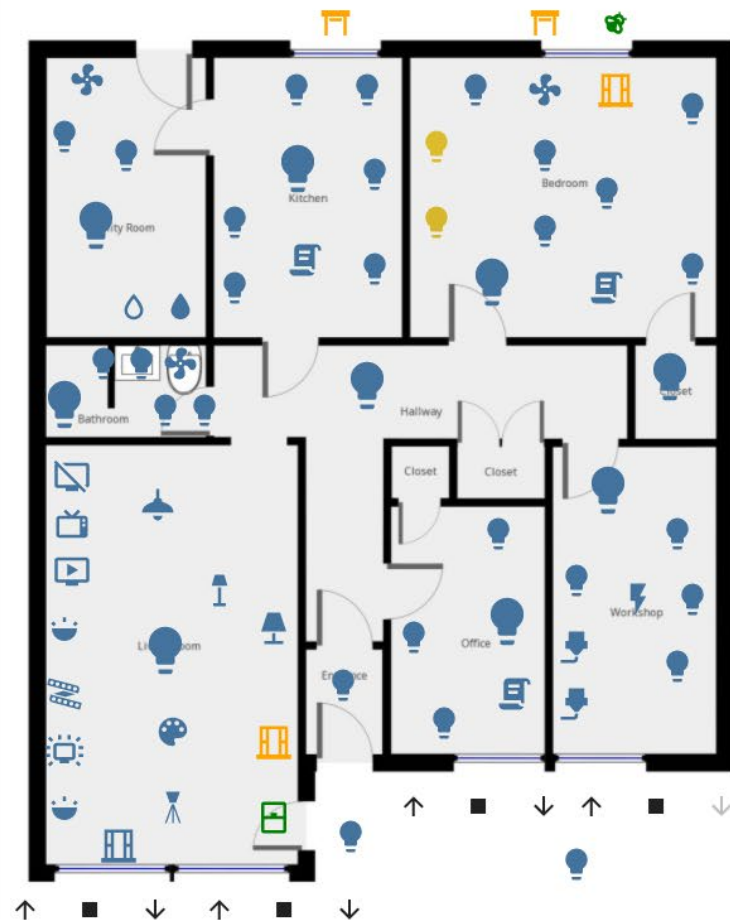
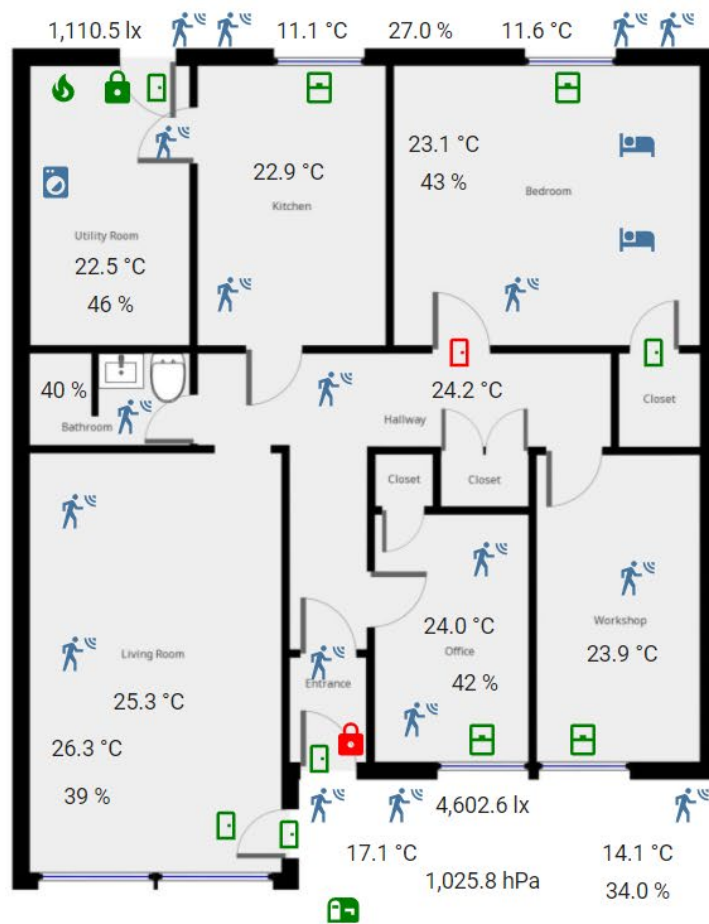






TEST

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

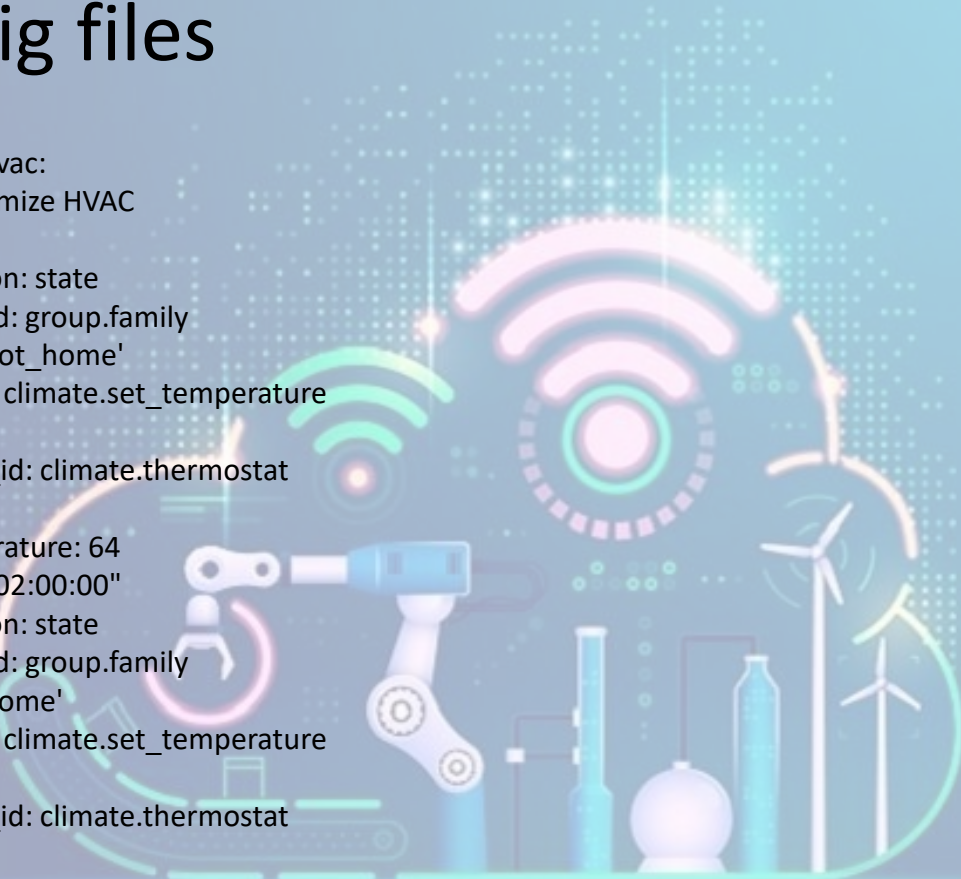
script:

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

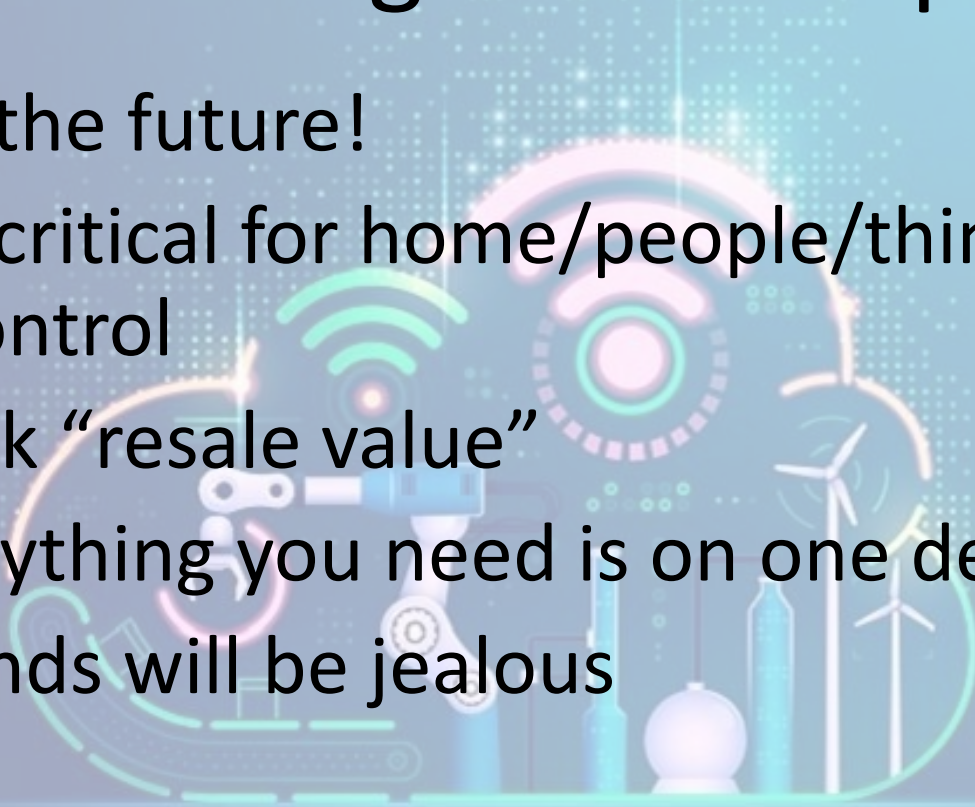
It is the future!

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

Think “resale value”

Everything you need is on one device

Friends will be jealous





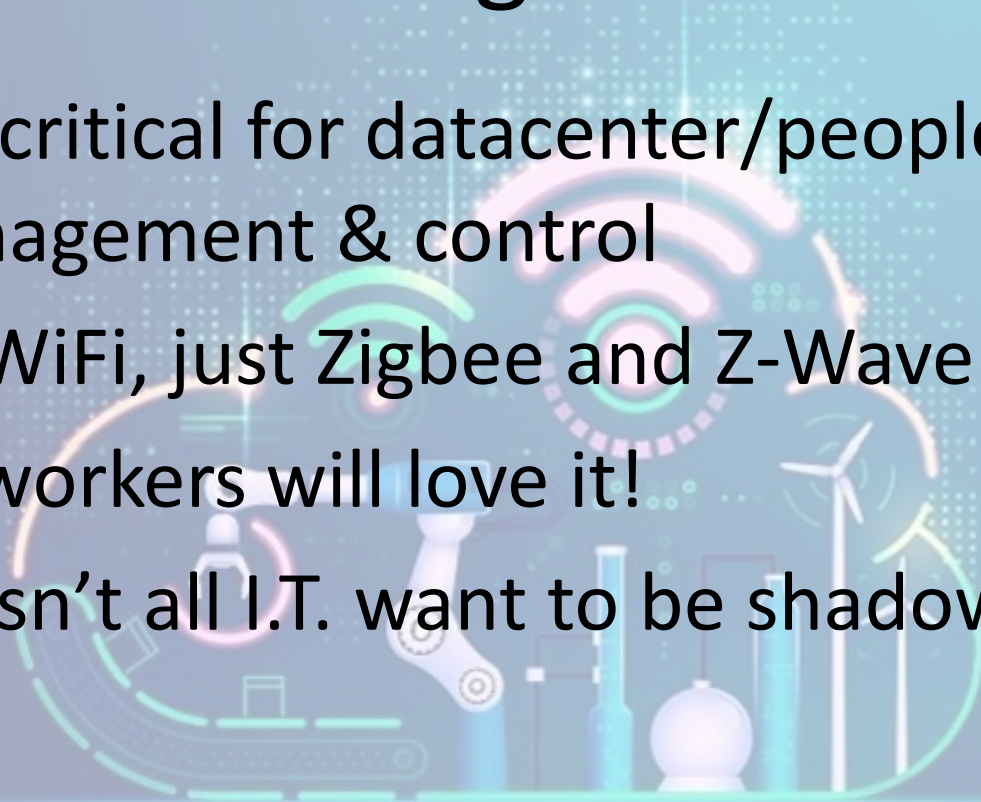
# Selling it to the Boss

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

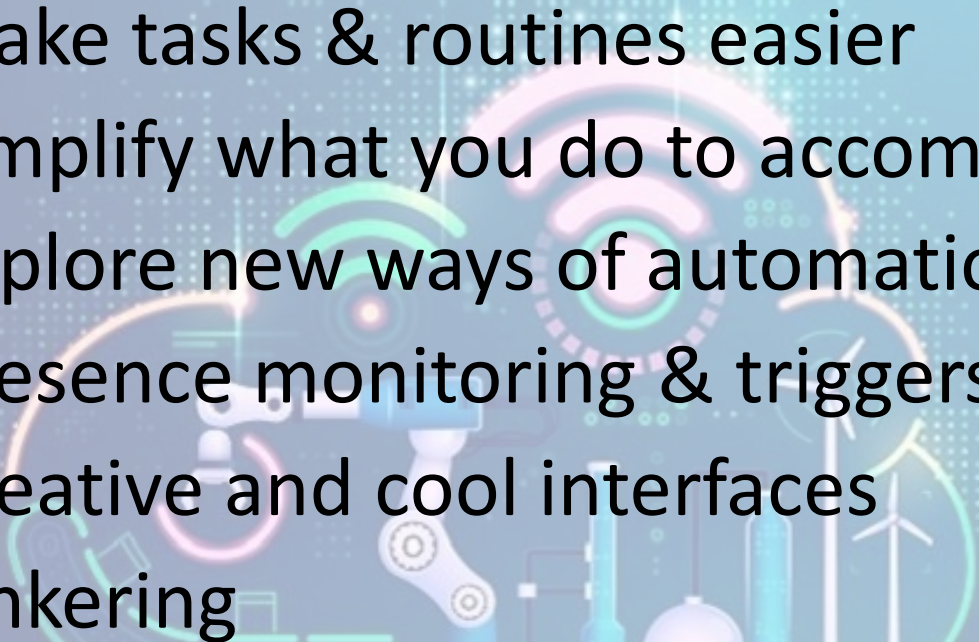
No WiFi, just Zigbee and Z-Wave

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
- 
- A stylized illustration in the background of the slide. It features a blue robotic arm with white joints, positioned as if it's working on or interacting with a green wind turbine. The scene is set against a light blue background with faint, glowing circular patterns and a grid of small dots, suggesting a digital or futuristic environment. The overall aesthetic is clean and modern, with a focus on technology and automation.

# 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/>



# New Stuff

- Year of the voice
  - Local voice control, keep everything in the home
  - Google, Alexa, Siri control still available
- Smart watch, Carplay, Android Auto improvements
  - Complications (widgets)
- QNAP/Backup to network storage
- Media consumption with network storage devices
- Drag n' Drop UI!
  - Need to basically start over on your dashboard
- Improvements to tiles
- Groups, Organization, Filtering improvements

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