

DANIELLE DI BELLA

@techincolor

Danielle specializes in Apple products and technologies.

She holds Apple's highest level in the IT track of the Certification Programs, and is an Apple Certified Trainer & Consultant.

Danielle has a proven track record with a wide range of business and personal clients including: Tech Data, Amsys, Mario Testino, Abercrombie & Fitch and Boston University.

In particular, Danielle specializes in solutions for businesses looking to integrate Apple technologies including advice, planning, deployment and maintenance for Apple equipment and networks.

IOT & HOME AUTOMATION

WHAT YOU NEED TO KNOW

THE SMART HOME

IOT & HOME AUTOMATION

THE SMART HOME

IOT & HOME AUTOMATION



AGENDA

IOT & HOME AUTOMATION

SIGNALING TECHNOLOGIES



I N S T E N



PLATFORMS



Google Home



Control4

SAVANT

SIGNALING TECHNOLOGIES : X10

IOT & HOME AUTOMATION

- **PIONEERING TECHNOLOGY** 1975
- **POWERLINE** wired into the walls
- **SLOW** bursts of 120 kHz RF signal to responders
- **LOW RELIABILITY** sensitive to line noise
- **SECURITY** no encryption
- **MORE AFFORDABLE**



SIGNALING TECHNOLOGIES : INSTEON

IOT & HOME AUTOMATION

- **COMPATIBILITY** X10, not an open standard
- **DUAL BAND** radio-frequency and powerline
- **RELIABLE** simulcast, scalable
- **FAST** 2880-38400 bps
- **EASY SETUP** Statelink
- **CONSUMER** Hub and Hub Pro

I N S T E  N[®]

SIGNALING TECHNOLOGIES : LUTRON

IOT & HOME AUTOMATION

- **PROPRIETARY PROTOCOL**
- **50+** years of innovation
- **15,000** products
- **ADVANCED LIGHTING**
- **WINDOW SHADE CONTROL**
- **CONSUMER** Lutron Caséta Wireless Smart Bridge



SIGNALING TECHNOLOGIES : ZIGBEE

IOT & HOME AUTOMATION

- **PURE WIRELESS** 802.15.4 IEEE, RF signaling/control
- **OPEN STANDARD** for hobbyists
- **MEMBERSHIP CONFLICT** fee to the ZigBee Alliance
- **COMMERCIAL/UTILITY INDUSTRIES** few in HA
- **MORE EXPENSIVE** than Insteon and Z-wave
- **CONSUMER** Crestron and Control4



SIGNALING TECHNOLOGIES : Z-WAVE

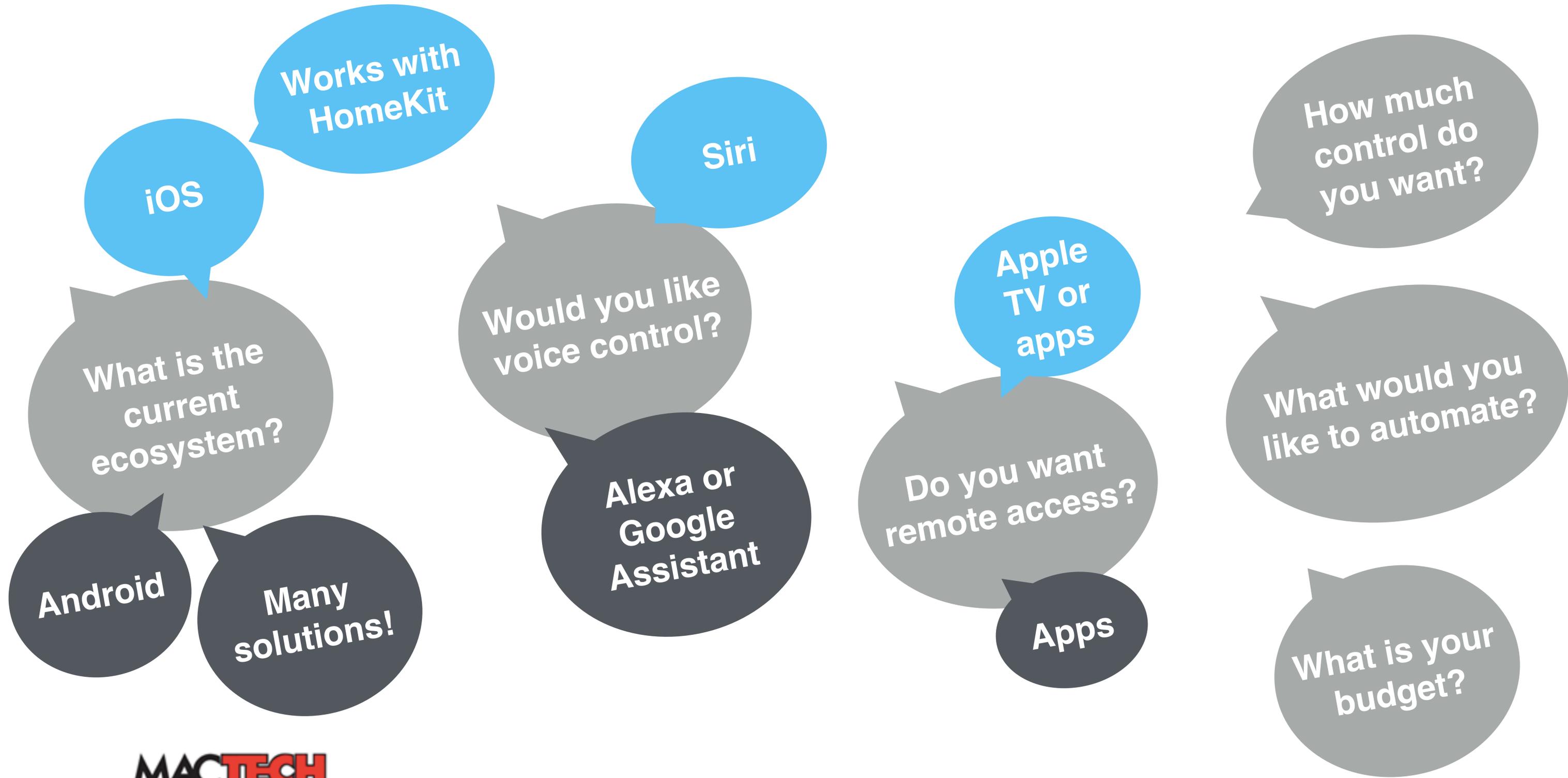
IOT & HOME AUTOMATION

- **PURE WIRELESS** RF signaling/control
- **BASED ON ZIGBEE** more simple, less expensive
- **NETWORK CONTROLLER** hub, setup and manage network
- **NETWORK SIZE** 232 nodes, but 30-40 ideal
- **LOW POWER** good for battery power
- **CONSUMER** SmartThings, Wink



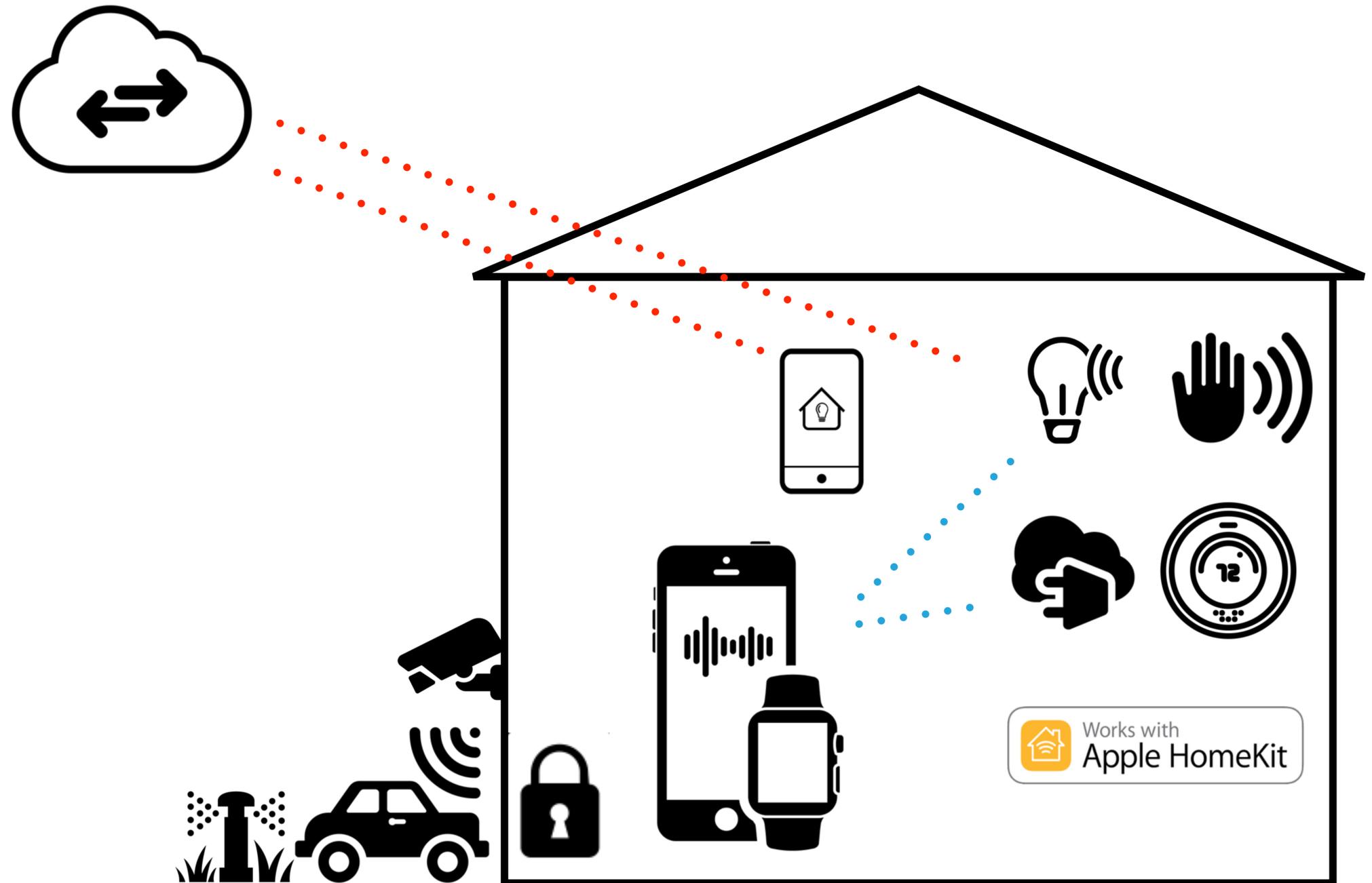
THE PLATFORMS

IOT & HOME AUTOMATION



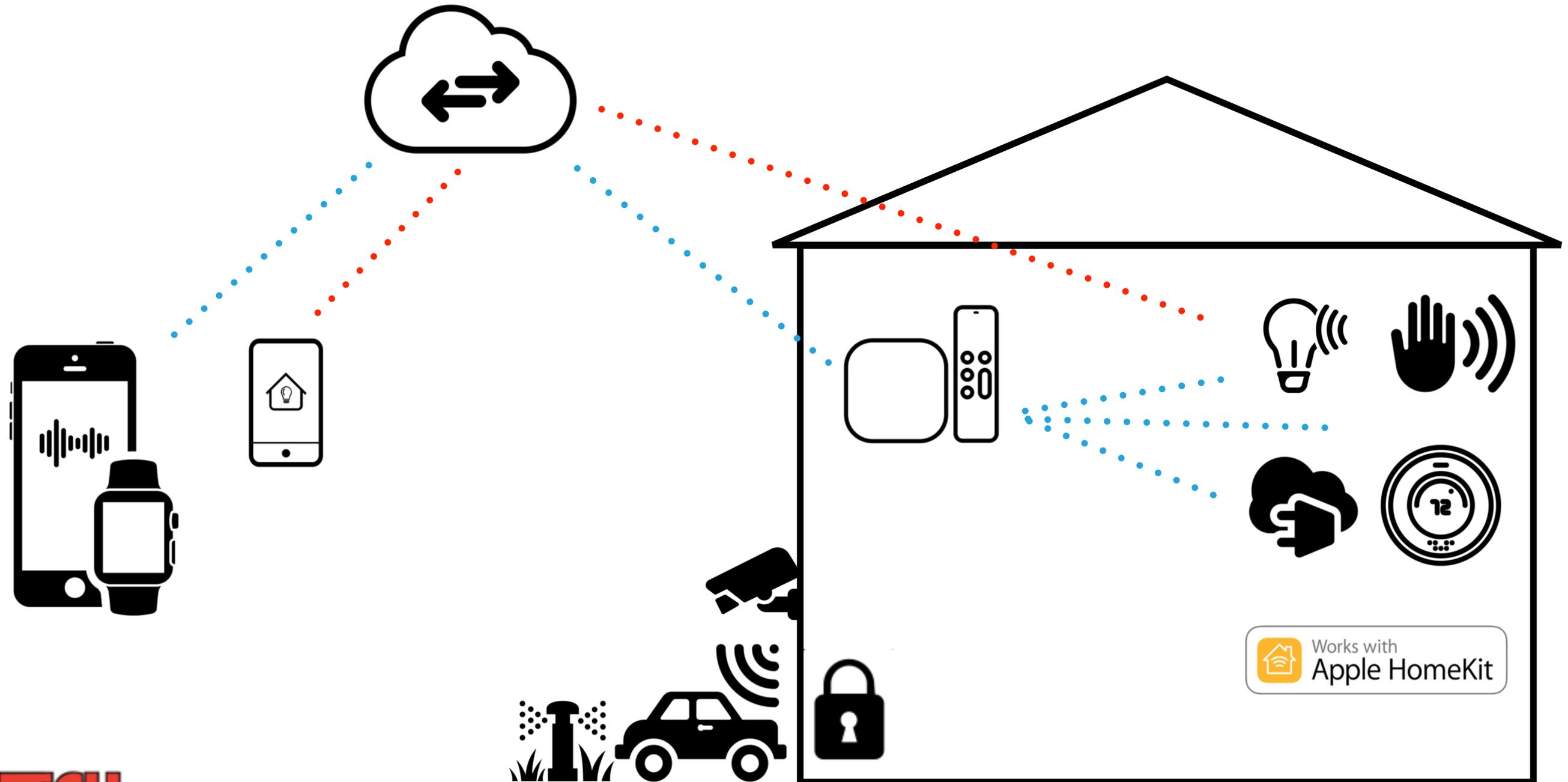
THE PLATFORMS : HOMEKIT

IOT & HOME AUTOMATION



THE PLATFORMS : HOMEKIT WITH REMOTE ACCESS

IOT & HOME AUTOMATION



THE PLATFORMS : HOMEKIT WITH OTHER SIGNALING TECHNOLOGIES

IOT & HOME AUTOMATION

I N S T E O N[®]

 **LUTRON**[®]

MACTECH
PRO EVENTS



THE PLATFORMS : APPLE HOMEKIT

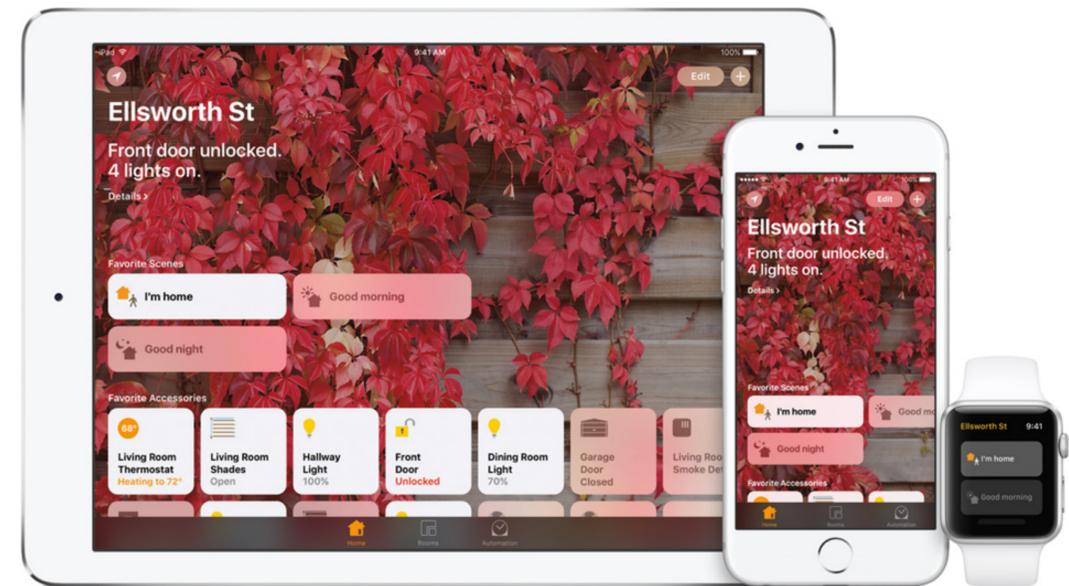
IOT & HOME AUTOMATION

- **VOICE CONTROL** Siri
- **NO HUB** iOS
- **APPLE TV** remote access, Siri
- **BLUETOOTH & WiFi** hubs for compatibility
- **SECURE** encryption, MFi Program



THE PLATFORMS : HOMEKIT IOT & HOME AUTOMATION

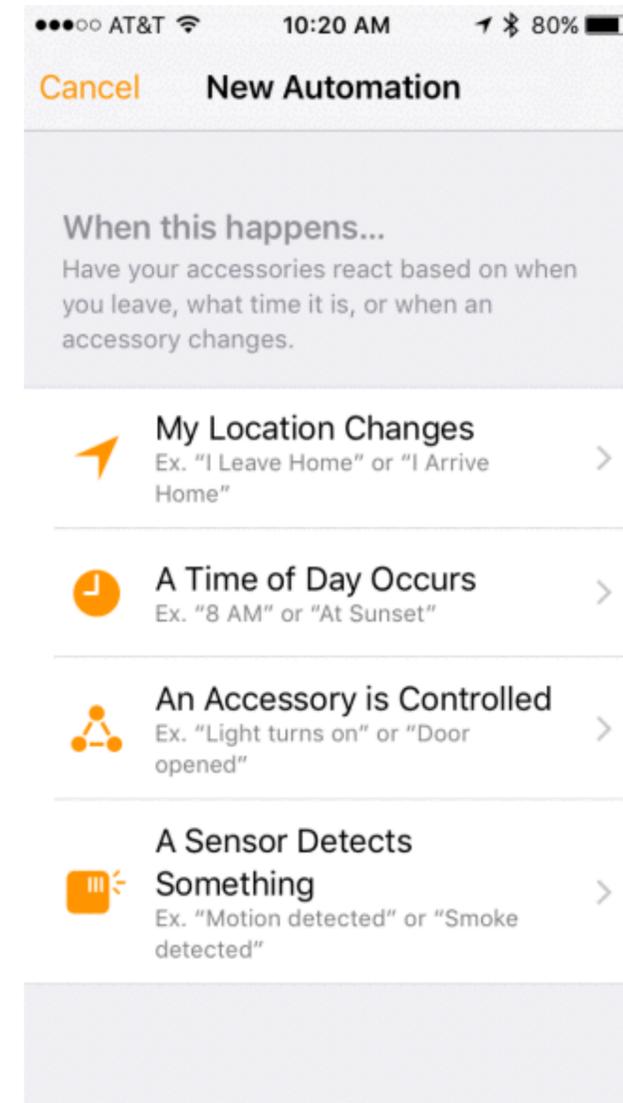
- **HOME APP** New! iOS 10
- **SETUP CODE STICKER**
- **CLASSIFICATION OPTIONS** accessories
- **COMMON DATABASE**
a home, room, accessory, function
- **MULTIPLE USERS** through iCloud accounts



THE PLATFORMS : HOMEKIT

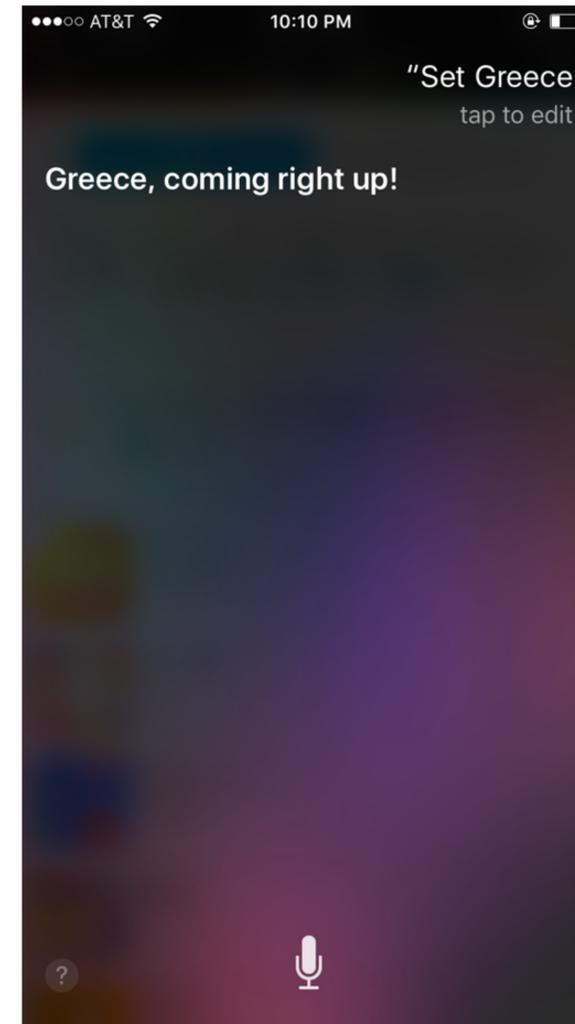
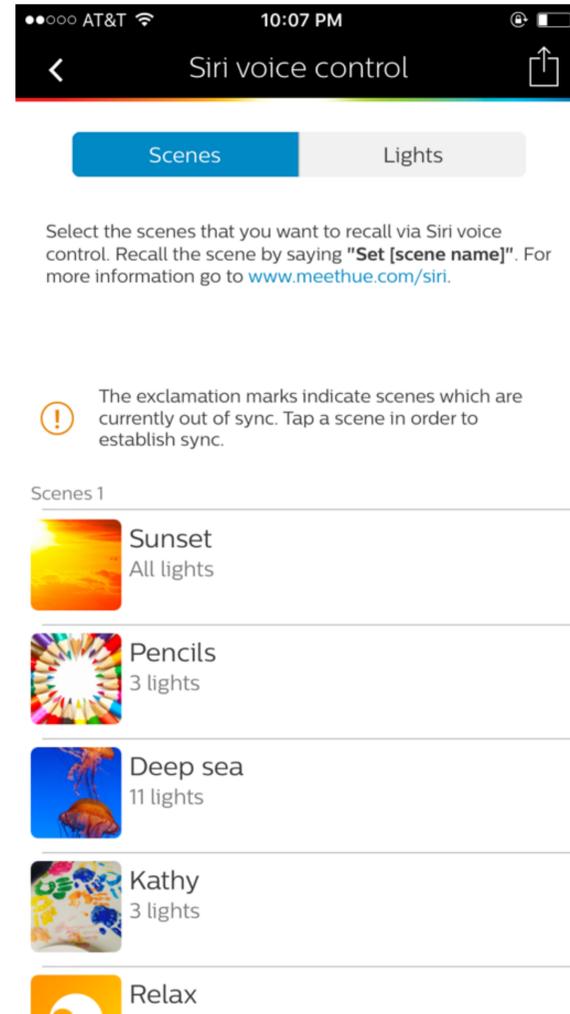
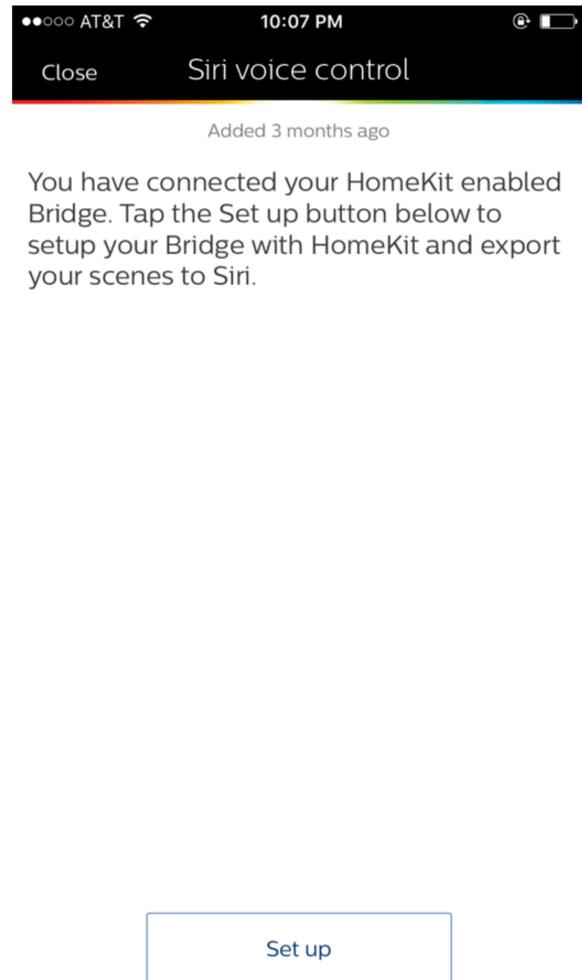
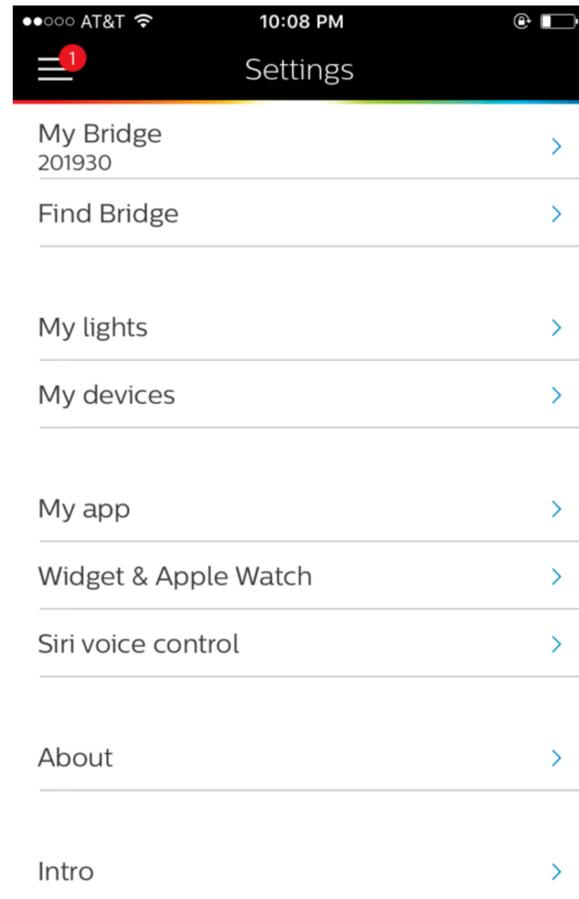
IOT & HOME AUTOMATION

- **HOMES** we should be so lucky!
- **ROOMS** per home
- **ZONES** upstairs
- **SCENES** “Party time!”
- **AUTOMATION** triggers



THE PLATFORMS : HOMEKIT PLUS PHILIPS HUE

IOT & HOME AUTOMATION



THE PLATFORMS : HOMEKIT PLUS ELGATO EVE

IOT & HOME AUTOMATION

eve door & window 



Open/Closed State

eve weather 



Temperature



Humidity



Air Pressure

eve room 



Air Quality



Temperature



Humidity



Consumption



Switch On/Off



Gain Insights

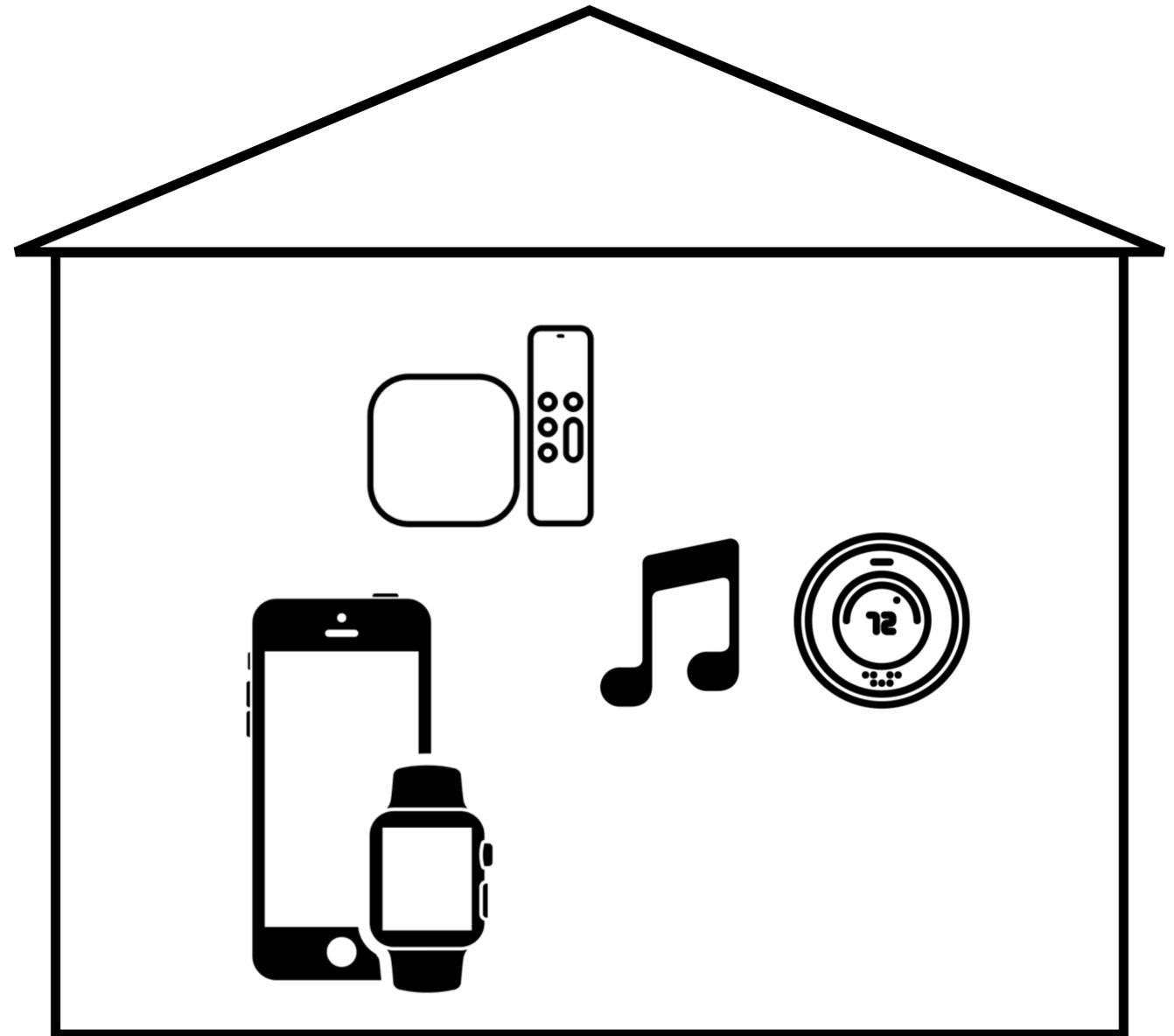
eve energy 



THE PLATFORMS: BRIDGES

IOT & HOME AUTOMATION

- **HOMEBRIDGE** Nest, SmartThings, Sonos
- **APPS** Indigo, manufacturer specific
- **IFTTT** recipes as triggers



THE PLATFORMS : NON-HOMEKIT

IOT & HOME AUTOMATION

wink

or

wemo

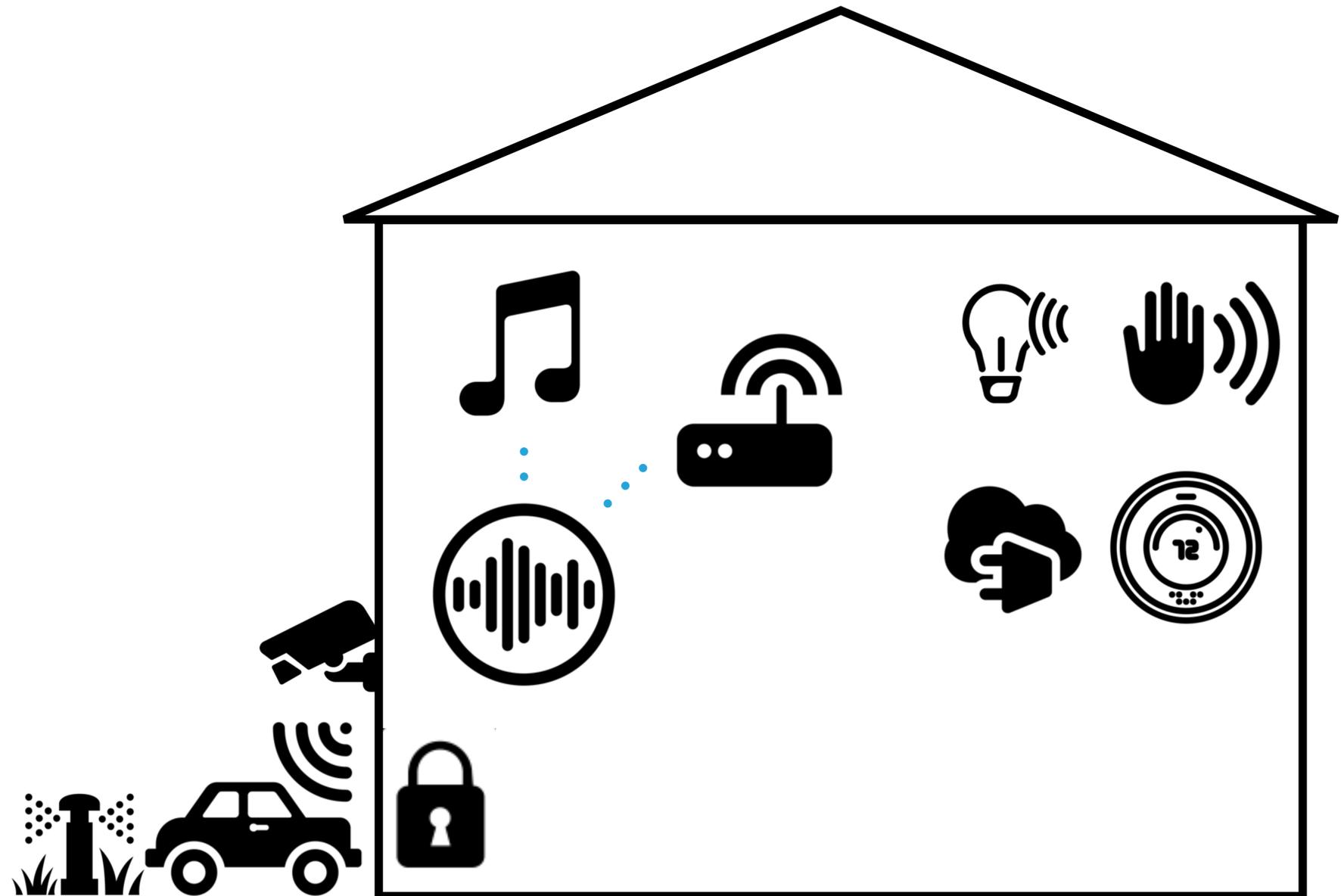
or

 SAMSUNG
SmartThings™

and

 amazon echo

MACTECH
PRO EVENTS



THE PLATFORMS : AMAZON

IOT & HOME AUTOMATION

- **VOICE RECOGNITION SPEAKER**
- **INTEGRATION** Sonos
- **CENTRAL SYSTEM** independent of phone
- **GROWING ECO SYSTEM** Dot, Tap, Dash Button
- **SECURITY** new considerations



THE PLATFORMS : GOOGLE

IOT & HOME AUTOMATION

- **WEAVE** communication platform
- **BRILLO OS** Android-based for smart home devices
- **NEST** Nest Weave (proprietary protocol) app, cameras, thermostats and detectors
- **OnHub** more than a router
- **COMPATIBLE SMART TECH** Mercedes Benz



THE PLATFORMS : GOOGLE

IOT & HOME AUTOMATION

- **VOICE RECOGNITION SPEAKER** multi-room
- **GOOGLE ASSISTANT**
- **CAST** Chrome, Spotify
- **COMING LATER THIS YEAR** price TBC

Google Home



Manage everyday tasks effortlessly



THE PLATFORMS

IOT & HOME AUTOMATION

- INTEGRATORS
- ZIGBEE & ZWAVE
- AUTHORIZED DEALERS
- FULL SOLUTIONS
- EXPENSIVE



RETAILER NETWORKS

IOT & HOME AUTOMATION

- **APPLE** Philips Hue Bridge, Lutron
- **AMAZON** Echo, SmartThings, Wink Hub
- **HOME DEPOT** Insteon, Lutron, Nest, Hue, SmartThings, WeMo, Wink
- **INTEGRATORS** Control 4, Crestron

GOING FORWARD

IOT & HOME AUTOMATION

- HOMEKIT
- AMAZON & SONOS
- GOOGLE
- SAMSUNG
- A RACE TO HORIZONTAL INTEGRATION

IOT & HOME AUTOMATION

Q&A and your success stories

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