

# What's New in HomeKit

Session 210

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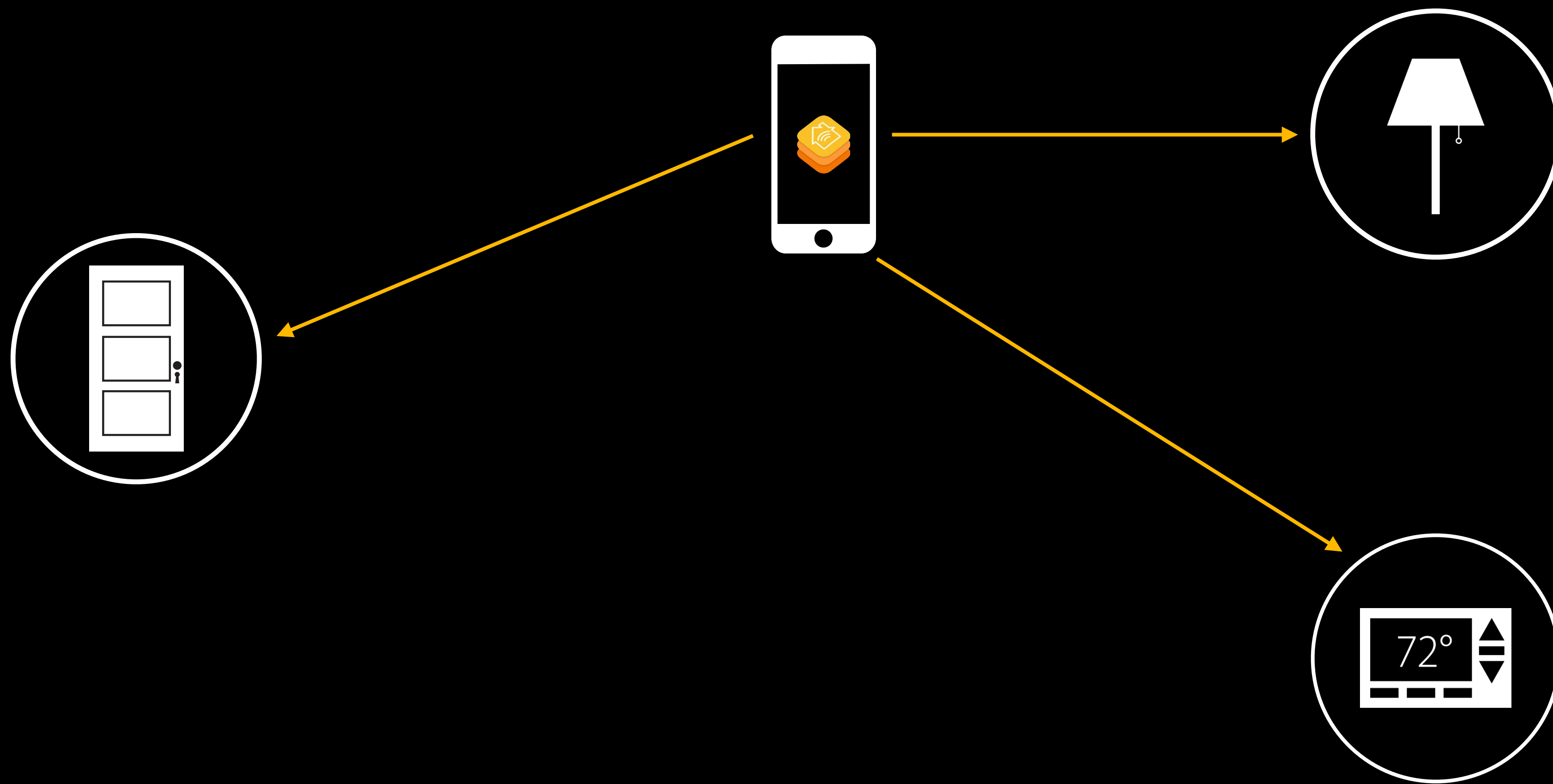


# HomeKit

Simplifying home automation

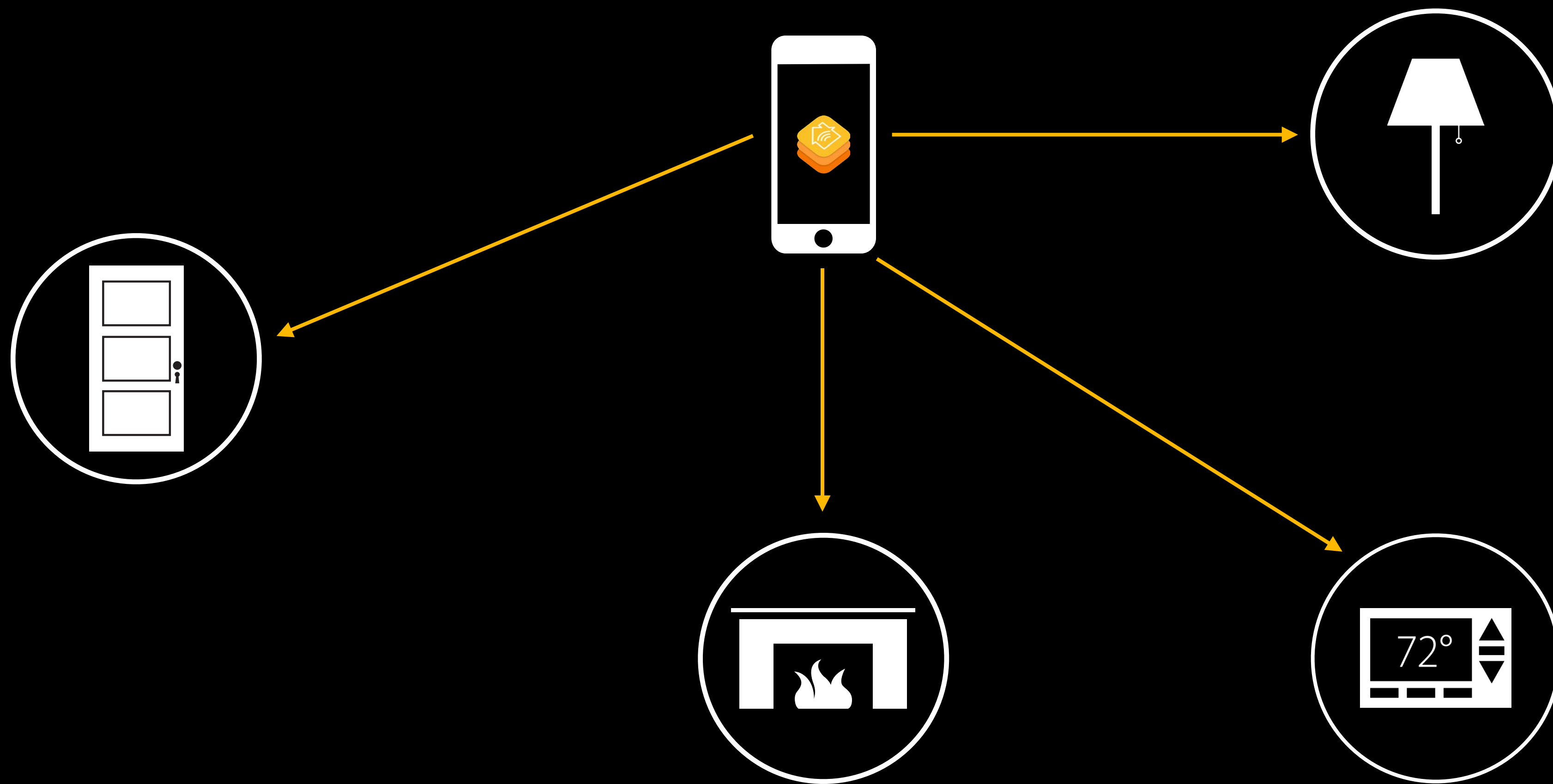
# HomeKit

Simplifying home automation



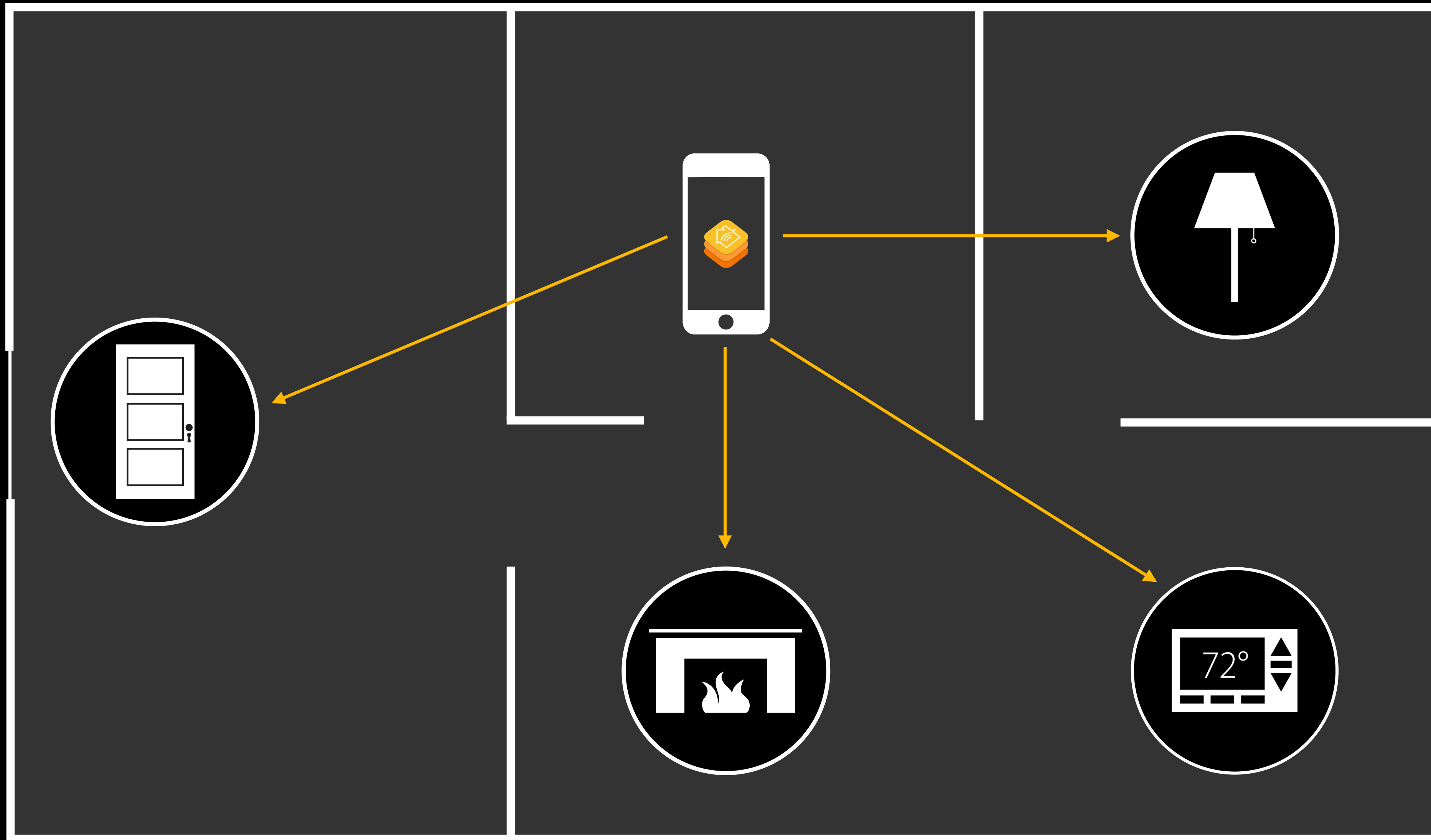
# HomeKit

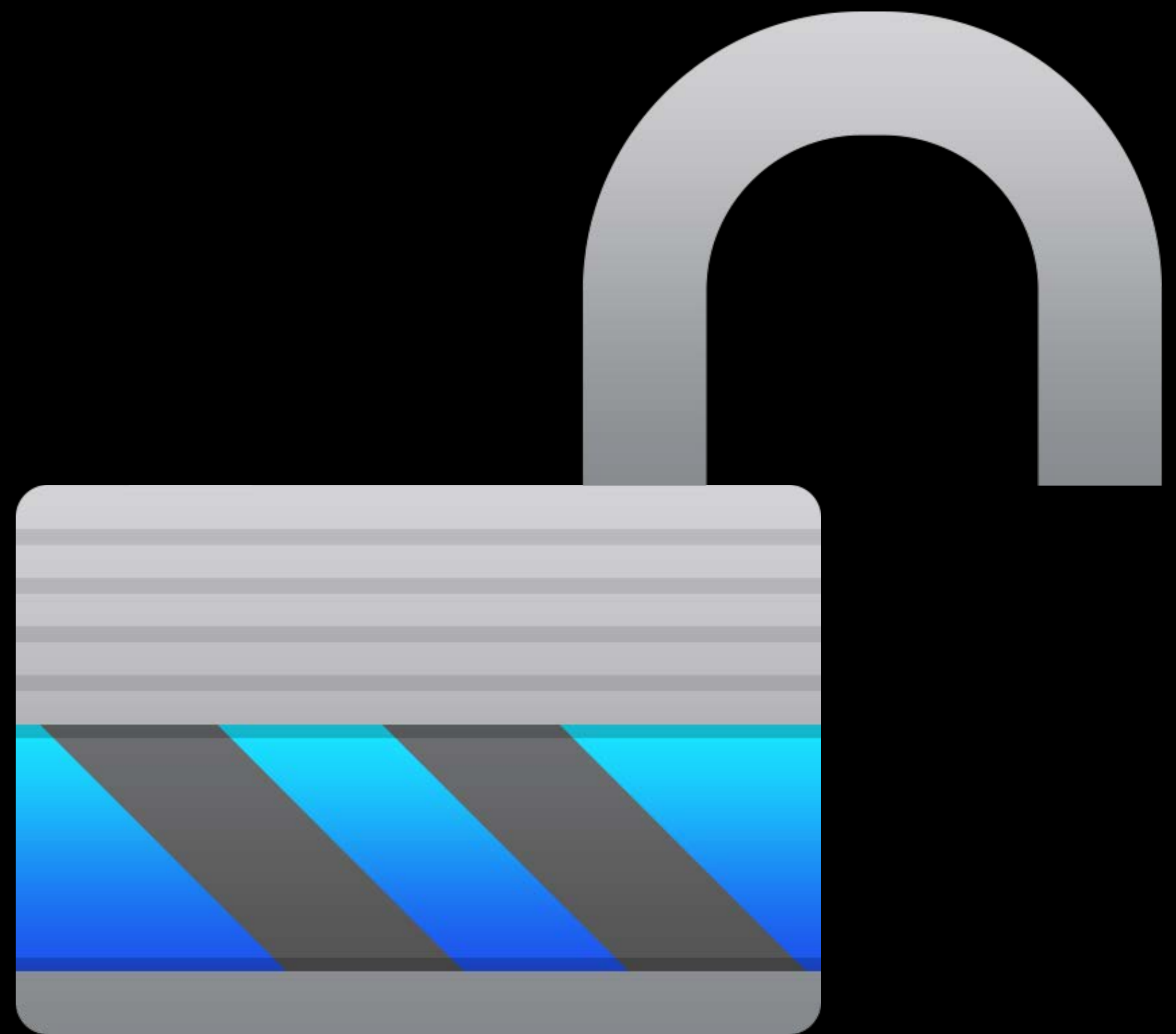
Simplifying home automation



# HomeKit

Simplifying home automation











# HomeKit in iOS 9

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HomeKit in iOS 9

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Accessory Updates

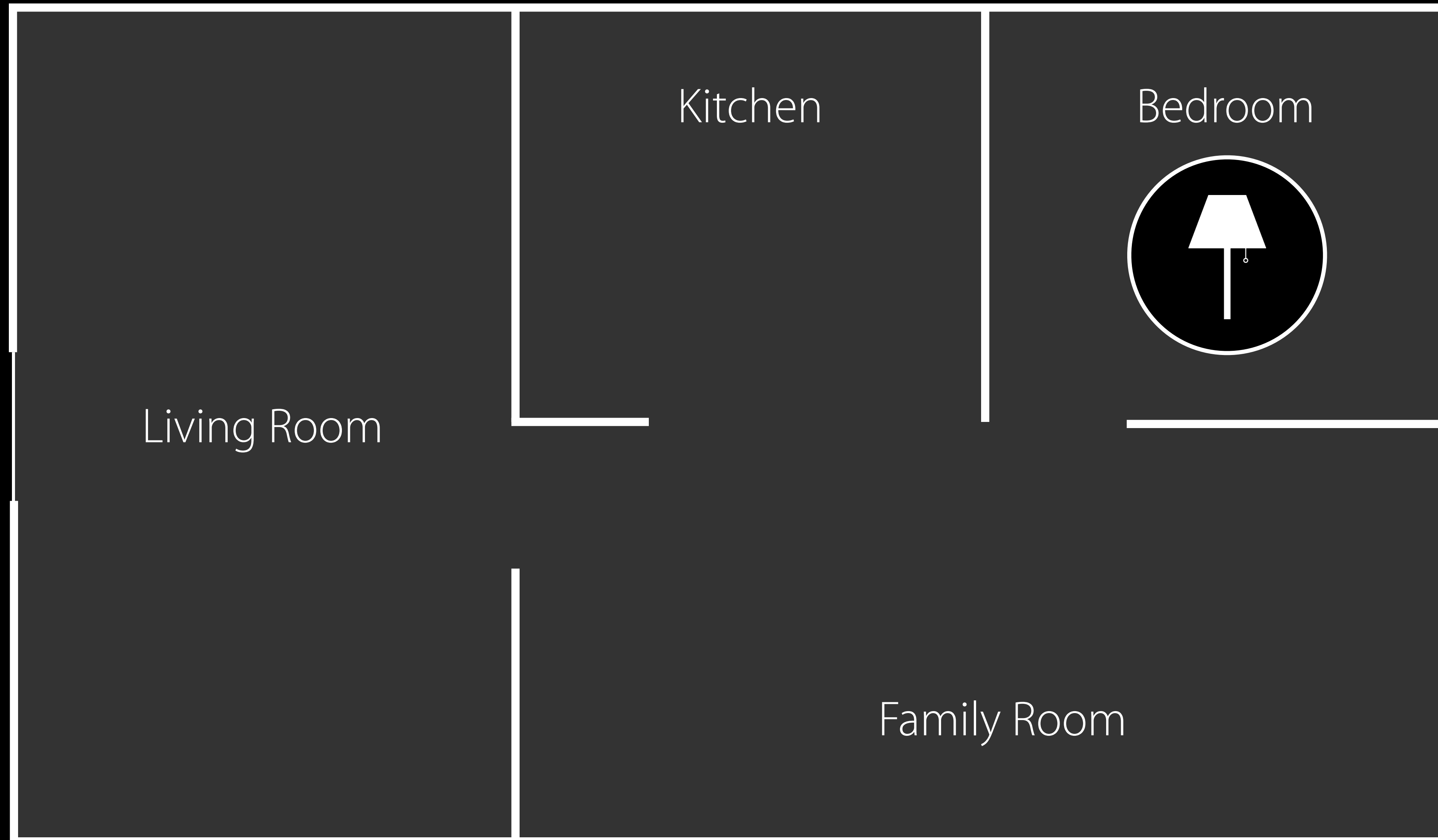
# HomeKit in iOS 9

---

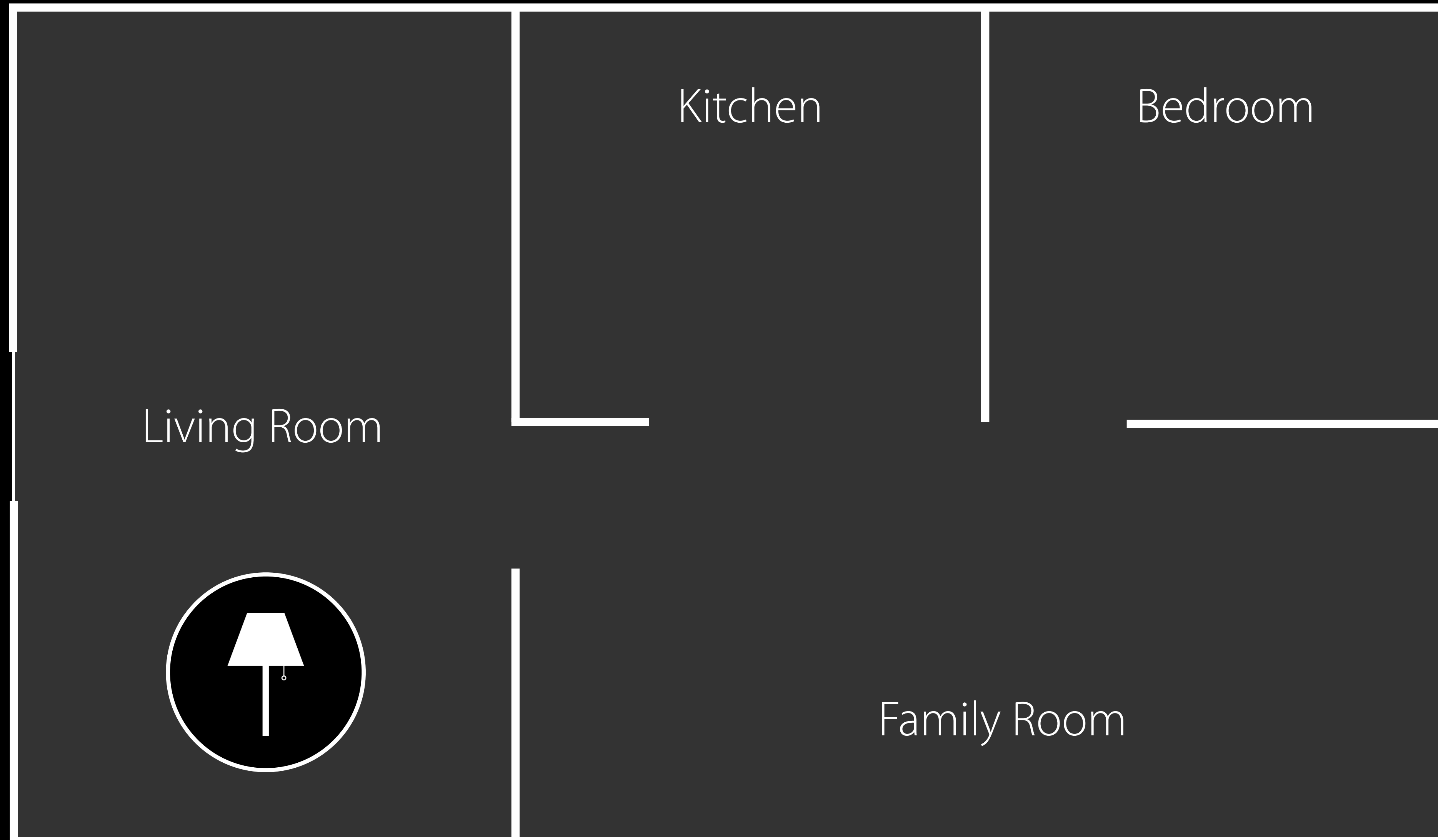
Accessory Updates

# HomeKit in iOS 9

# Maintain Existing Objects



# Maintain Existing Objects



# Maintain Existing Objects

Targeted change notifications

```
protocol HMHomeManagerDelegate : NSObjectProtocol {  
    func homeManagerDidUpdateHomes(manager: HMHomeManager)  
}
```



# Maintain Existing Objects

Targeted change notifications

```
protocol HMHomeManagerDelegate : NSObjectProtocol {  
    func homeManagerDidUpdateHomes(manager: HMHomeManager)  
}
```

# Maintain Existing Objects

Targeted change notifications

```
protocol HMHomeManagerDelegate : NSObjectProtocol {  
    func homeManagerDidUpdateHomes(manager: HMHomeManager)  
}
```

```
protocol HMHomeDelegate : NSObjectProtocol {  
    func home(home: HMHome, didUpdateRoom: HMRoom, forAccessory: HMAccessory)  
}
```



# My Living Room





```
class HMRoom : NSObject {  
    var name: String { get }  
}
```

# Persistent Identifiers

NEW

```
class HMRoom : NSObject {  
    var name: String { get }  
}
```

# Persistent Identifiers

NEW

```
class HMRoom : NSObject {  
    var name: String { get }  
    var uniqueIdentifier: NSUUID { get }  
}
```

Available on all relevant HomeKit classes

# User Management

```
extension HMHome {  
    func addUserWithCompletionHandler(completion: (HMUser?, NSError?) -> Void)  
  
    func removeUser(user: HMUser, completionHandler: (NSError?) -> Void)  
  
    var users: [HMUser] { get }  
}
```

# User Management

```
extension HMHome {  
    func addUserWithCompletionHandler(completion: (HMUser?, NSError?) -> Void)  
  
    func removeUser(user: HMUser, completionHandler: (NSError?) -> Void)  
  
    var users: [HMUser] { get }  
}
```



# User Management

```
extension HMHome {
```

```
    func addUserWithCompletionHandler(completion: (HMUser?, NSError?) -> Void)
```

```
    func removeUser(user: HMUser, completionHandler: (NSError?) -> Void)
```

```
    var users: [HMUser] { get }
```

```
}
```



# User Management

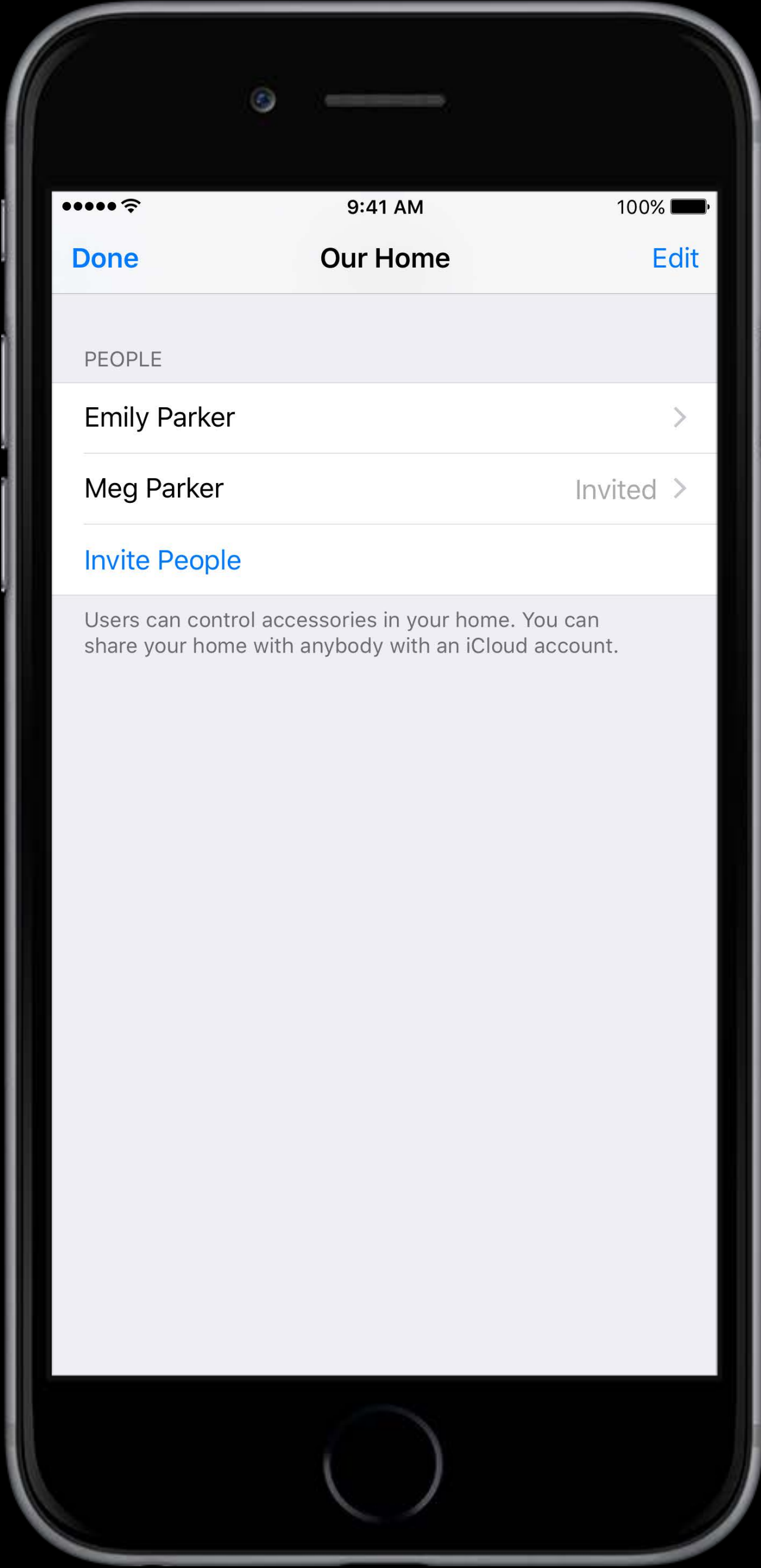
NEW

```
extension HMHome {  
    func manageUsersWithCompletionHandler(completion: (NSError?) -> Void)  
}
```

# User Management

NEW

```
extension HMHome {  
    func manageUsersWithCompletionHandler(completion: (NSError?) -> Void)  
}
```



# User Capabilities

NEW

# User Capabilities

NEW

Display relevant capabilities

# User Capabilities

NEW

Display relevant capabilities

Determine privileges

# User Capabilities

HMHomeAccessControl

```
extension HMHome {  
    var currentUser: HMUser { get }  
}
```



# User Capabilities

HMHomeAccessControl

```
extension HMHome {  
    var currentUser: HMUser { get }  
}
```

# User Capabilities

HMHomeAccessControl

```
extension HMHome {  
    var currentUser: HMUser { get }  
    func homeAccessControlForUser(user: HMUser) -> HMHomeAccessControl  
}
```

# User Capabilities

HMHomeAccessControl

```
extension HMHome {  
    var currentUser: HMUser { get }  
    func homeAccessControlForUser(user: HMUser) -> HMHomeAccessControl  
}
```

# User Capabilities

HMHomeAccessControl

```
extension HMHome {  
    var currentUser: HMUser { get }  
    func homeAccessControlForUser(user: HMUser) -> HMHomeAccessControl  
}
```

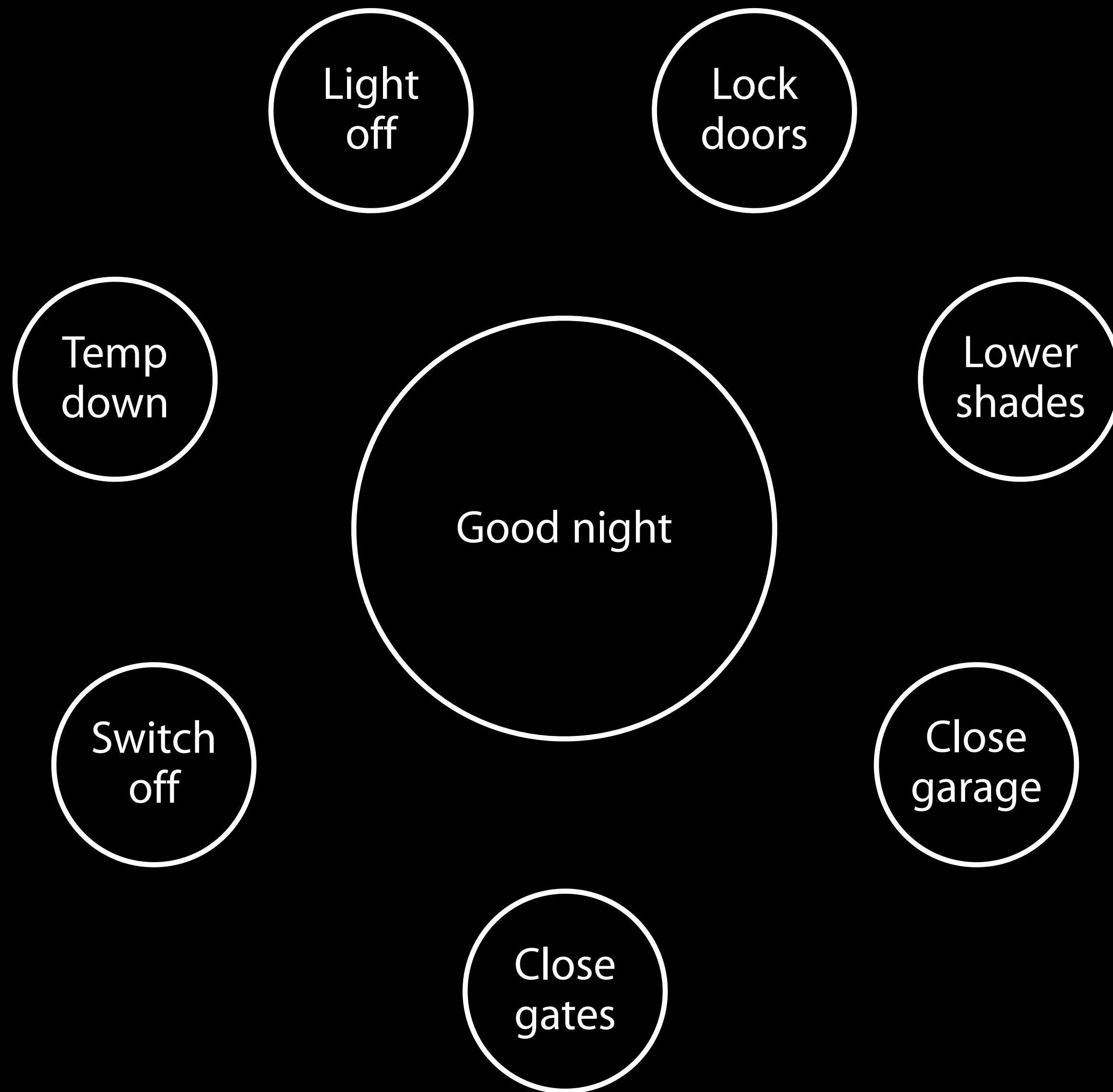
```
class HMHomeAccessControl : NSObject {  
    var administrator: Bool { get }  
}
```

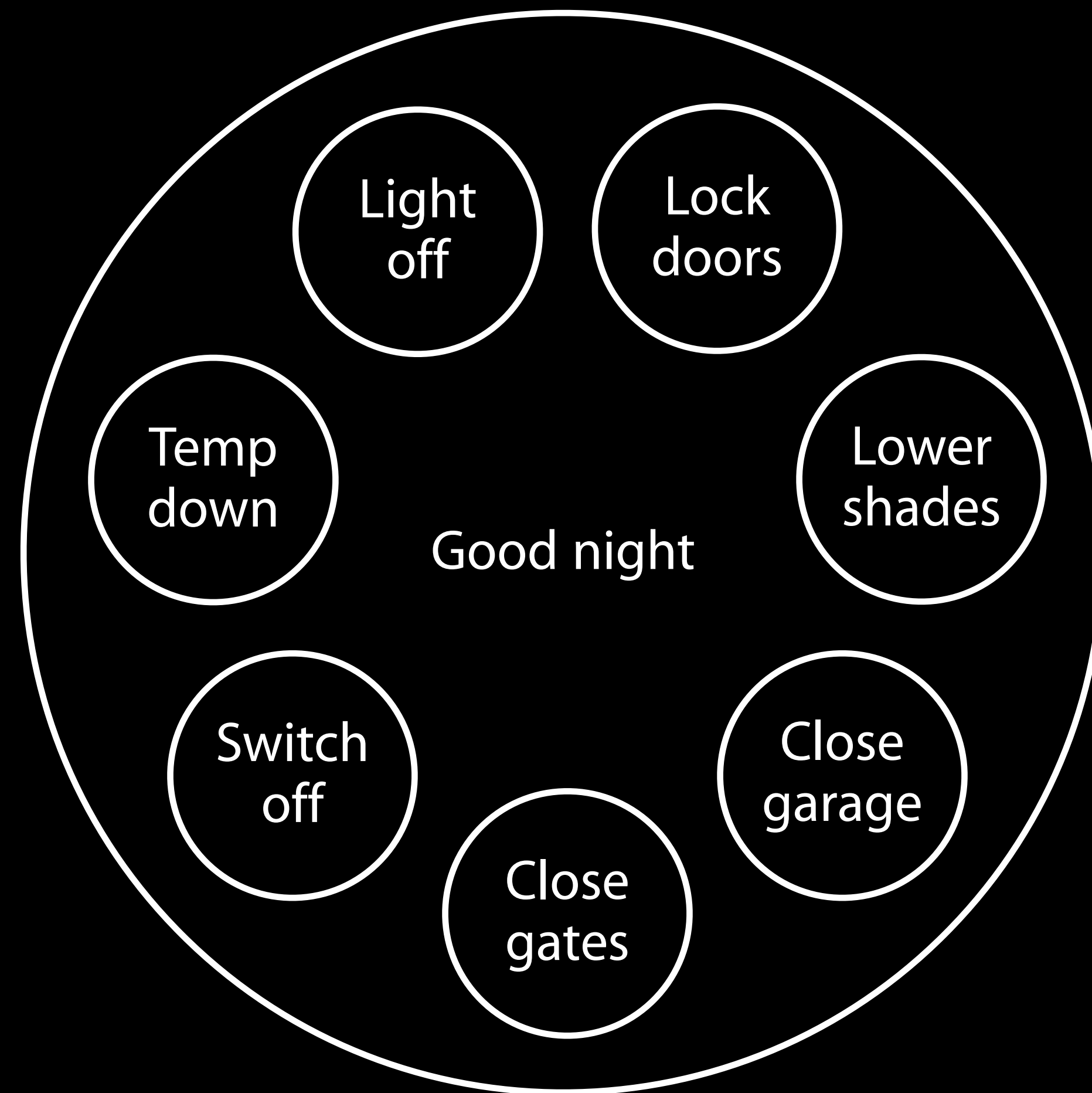
# User Capabilities

## HMHomeAccessControl

```
extension HMHome {  
    var currentUser: HMUser { get }  
    func homeAccessControlForUser(user: HMUser) -> HMHomeAccessControl  
}
```

```
class HMHomeAccessControl : NSObject {  
    var administrator: Bool { get }  
}
```





# Predefined Scenes

NEW



# Predefined Scenes

NEW

Four common events

# Predefined Scenes

NEW

Four common events

- Get up

# Predefined Scenes

NEW

Four common events

- Get up
- Leave

# Predefined Scenes

NEW

Four common events

- Get up
- Leave
- Return

# Predefined Scenes

NEW

Four common events

- Get up
- Leave
- Return
- Go to bed

# Predefined Scenes

NEW

Four common events

- Get up
- Leave
- Return
- Go to bed

Suggest actions

# Predefined Scenes

NEW

Four common events

- Get up
- Leave
- Return
- Go to bed

Suggest actions

Cannot be deleted

# Predefined Scenes

## HMActionSet

```
class HMActionSet : NSObject {  
    var actionSetType: String { get }  
}
```



# Predefined Scenes

## HMActionSet

```
class HMActionSet : NSObject {  
    var actionSetType: String { get }  
}
```

# Predefined Scenes

## HMActionSet

```
class HMActionSet : NSObject {  
    var actionSetType: String { get }  
}  
  
let HMActionSetTypeWakeUp: String  
let HMActionSetTypeSleep: String  
let HMActionSetTypeHomeDeparture: String  
let HMActionSetTypeHomeArrival: String
```

# Predefined Scenes

## HMActionSet

```
class HMActionSet : NSObject {  
    var actionSetType: String { get }  
}
```

```
let HMActionSetTypeWakeUp: String  
let HMActionSetTypeSleep: String  
let HMActionSetTypeHomeDeparture: String  
let HMActionSetTypeHomeArrival: String
```

# Predefined Scenes

## HMActionSet

```
class HMActionSet : NSObject {  
    var actionSetType: String { get }  
}  
  
let HMActionSetTypeWakeUp: String  
let HMActionSetTypeSleep: String  
let HMActionSetTypeHomeDeparture: String  
let HMActionSetTypeHomeArrival: String  
let HMActionSetTypeUserDefined: String
```

# Predefined Scenes

## HMActionSet

```
class HMActionSet : NSObject {  
    var actionSetType: String { get }  
}  
  
let HMActionSetTypeWakeUp: String  
let HMActionSetTypeSleep: String  
let HMActionSetTypeHomeDeparture: String  
let HMActionSetTypeHomeArrival: String  
let HMActionSetTypeUserDefined: String
```

# Predefined Scenes

HMHome

```
extension HMHome {  
    var actionSets: [HMActionSet] { get }  
}
```

# Predefined Scenes

HMHome

```
extension HMHome {  
    var actionSets: [HMActionSet] { get }  
}
```

# Predefined Scenes

HMHome

```
extension HMHome {  
    var actionSets: [HMActionSet] { get }  
  
    func builtinActionSetOfType(actionSetType: String) -> HMActionSet?  
}
```



# Predefined Scenes

HMHome

```
extension HMHome {  
    var actionSets: [HMActionSet] { get }
```

```
    func builtinActionSetOfType(actionSetType: String) -> HMActionSet?
```

```
}
```

# Scenes and Siri

# Scenes and Siri

Siri understands the names of scenes

# Scenes and Siri

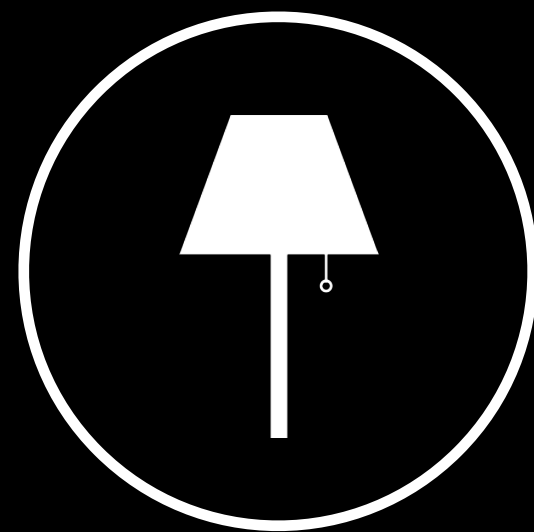
Siri understands the names of scenes

Speaking the name of scene executes it

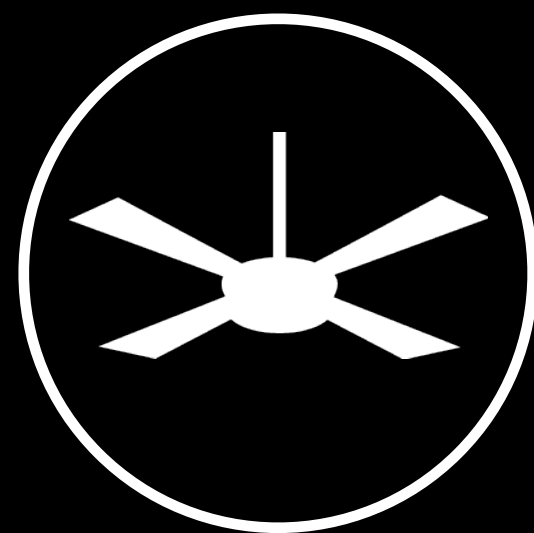


Acme Ultra  
A984CCD90714

Acme Deluxe  
4C6B8F191C84



Acme Ultra  
A984CCD90714



Acme Deluxe  
4C6B8F191C84

# Accessory Category

NEW



# Accessory Category

NEW

Available during setup

# Accessory Category

NEW

Available during setup

Specifies primary category of the accessory

# Accessory Category

HMAccessoryCategory

```
class HMAccessoryCategory : NSObject {  
    var categoryType: String { get }  
}
```

# Accessory Category

HMAccessoryCategory

```
class HMAccessoryCategory : NSObject {  
    var categoryType: String { get }  
}
```

# Accessory Category

HMAccessoryCategory

```
class HMAccessoryCategory : NSObject {  
    var categoryType: String { get }  
}  
let HMAccessoryCategoryTypeLightbulb: String
```

# Accessory Category

HMAccessoryCategory

```
class HMAccessoryCategory : NSObject {  
    var categoryType: String { get }  
}  
let HMAccessoryCategoryTypeLightbulb: String
```

# Accessory Category

HMAccessoryCategory

```
class HMAccessoryCategory : NSObject {  
    var categoryType: String { get }  
}  
let HMAccessoryCategoryTypeLightbulb: String  
let HMAccessoryCategoryTypeFan: String
```

# Accessory Category

HMAccessoryCategory

```
class HMAccessoryCategory : NSObject {  
    var categoryType: String { get }  
}  
let HMAccessoryCategoryTypeLightbulb: String  
let HMAccessoryCategoryTypeFan: String
```



# Accessory Category

HMAccessoryCategory

```
class HMAccessoryCategory : NSObject {  
    var categoryType: String { get }  
}  
  
let HMAccessoryCategoryTypeLightbulb: String  
let HMAccessoryCategoryTypeFan: String  
  
class HMAccessory : NSObject {  
    var category: HMAccessoryCategory { get }  
}
```

# Accessory Category

HMAccessoryCategory

```
class HMAccessoryCategory : NSObject {  
    var categoryType: String { get }  
}  
let HMAccessoryCategoryTypeLightbulb: String  
let HMAccessoryCategoryTypeFan: String
```

```
class HMAccessory : NSObject {  
    var category: HMAccessoryCategory { get }  
}
```

# HomeKit and Apple Watch

NEW



# HomeKit and Apple Watch

NEW

HomeKit available on watchOS



# HomeKit and Apple Watch

NEW

HomeKit available on watchOS

Home data is mirrored on Apple Watch





# HomeKit and Apple Watch

NEW

HomeKit available on watchOS

Home data is mirrored on Apple Watch

Capabilities

- View homes



# HomeKit and Apple Watch

NEW

HomeKit available on watchOS

Home data is mirrored on Apple Watch

Capabilities

- View homes
- Control accessories



# HomeKit and Apple Watch

NEW

HomeKit available on watchOS

Home data is mirrored on Apple Watch

Capabilities

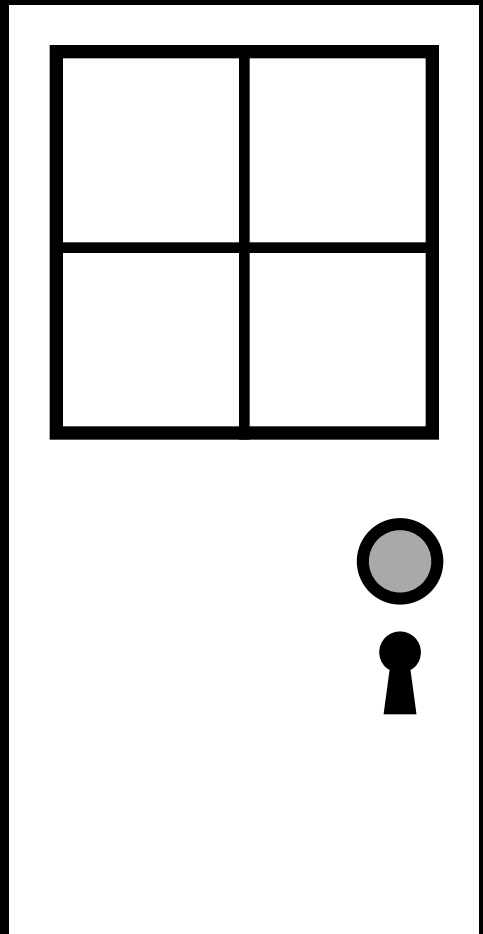
- View homes
- Control accessories
- Execute scenes



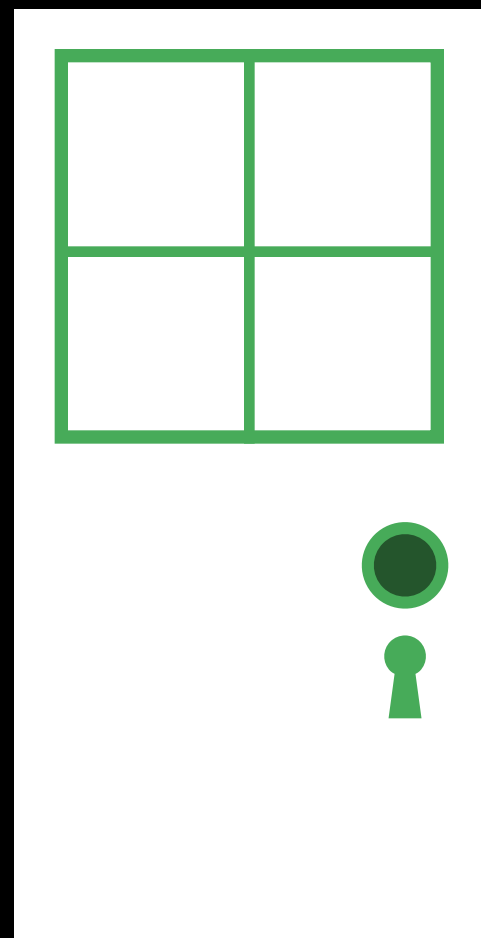


# Triggers

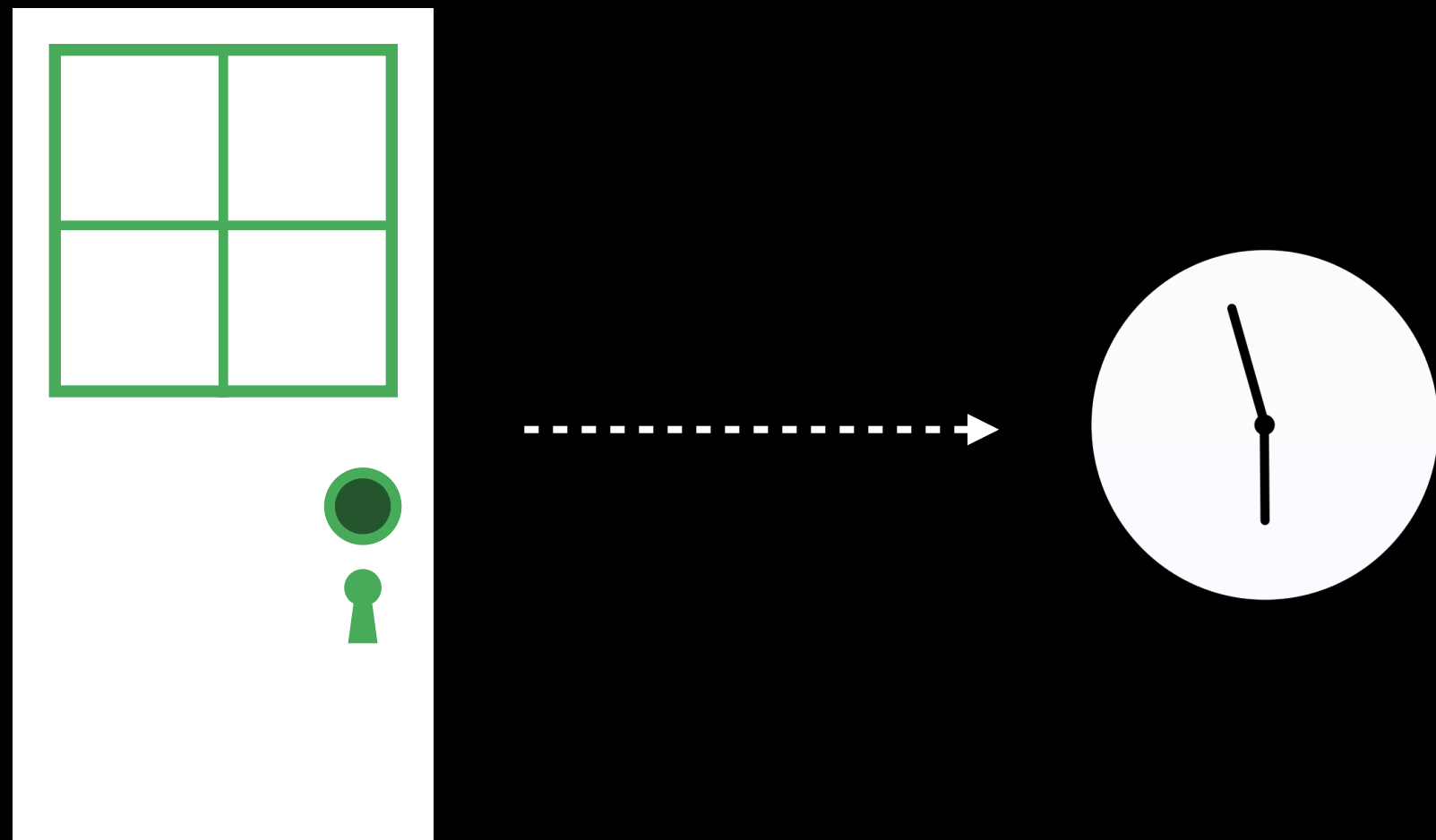
# Triggers



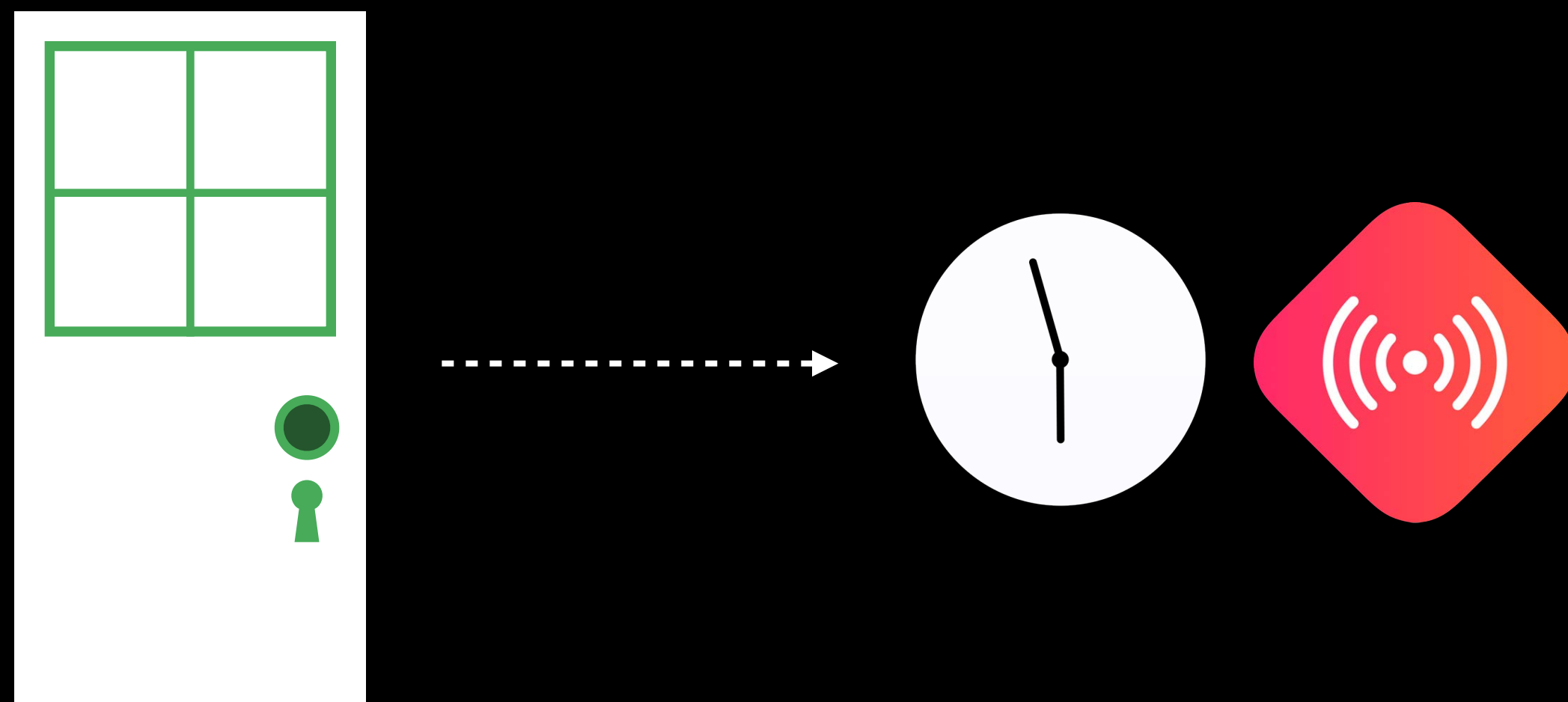
# Triggers



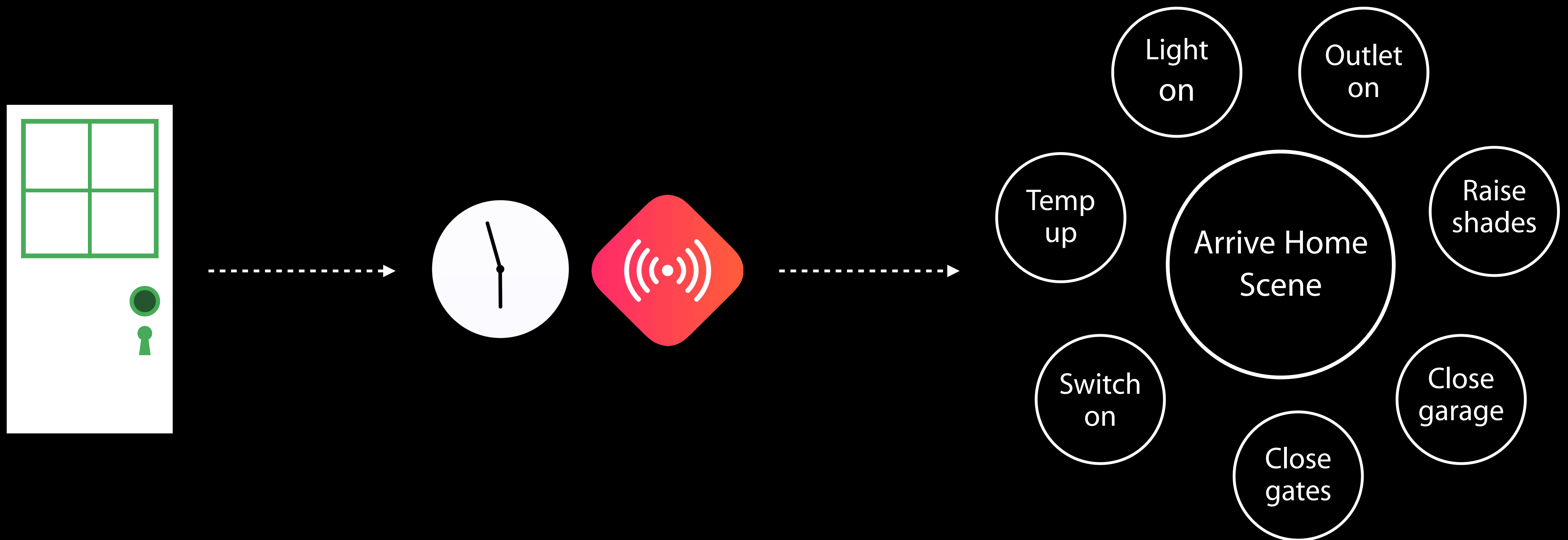
# Triggers



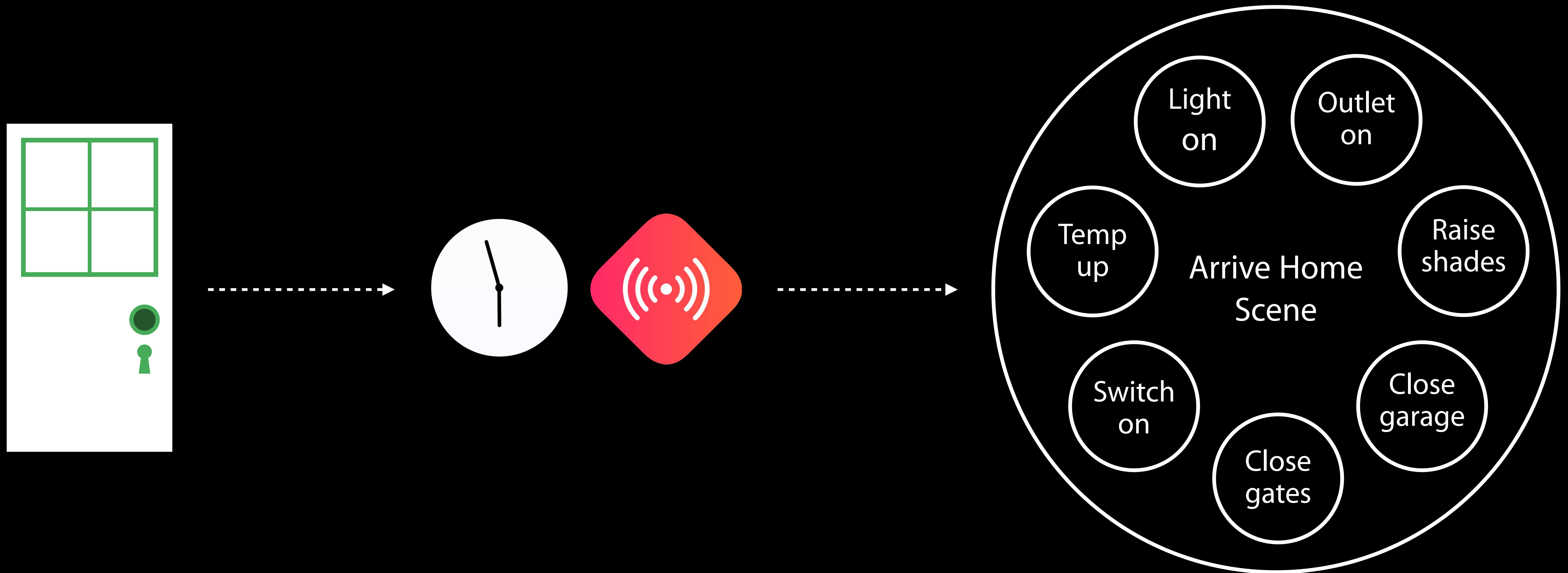
# Triggers



# Triggers



# Triggers



# Event Triggers

NEW



# Event Triggers

## Events

NEW

Events activate a trigger

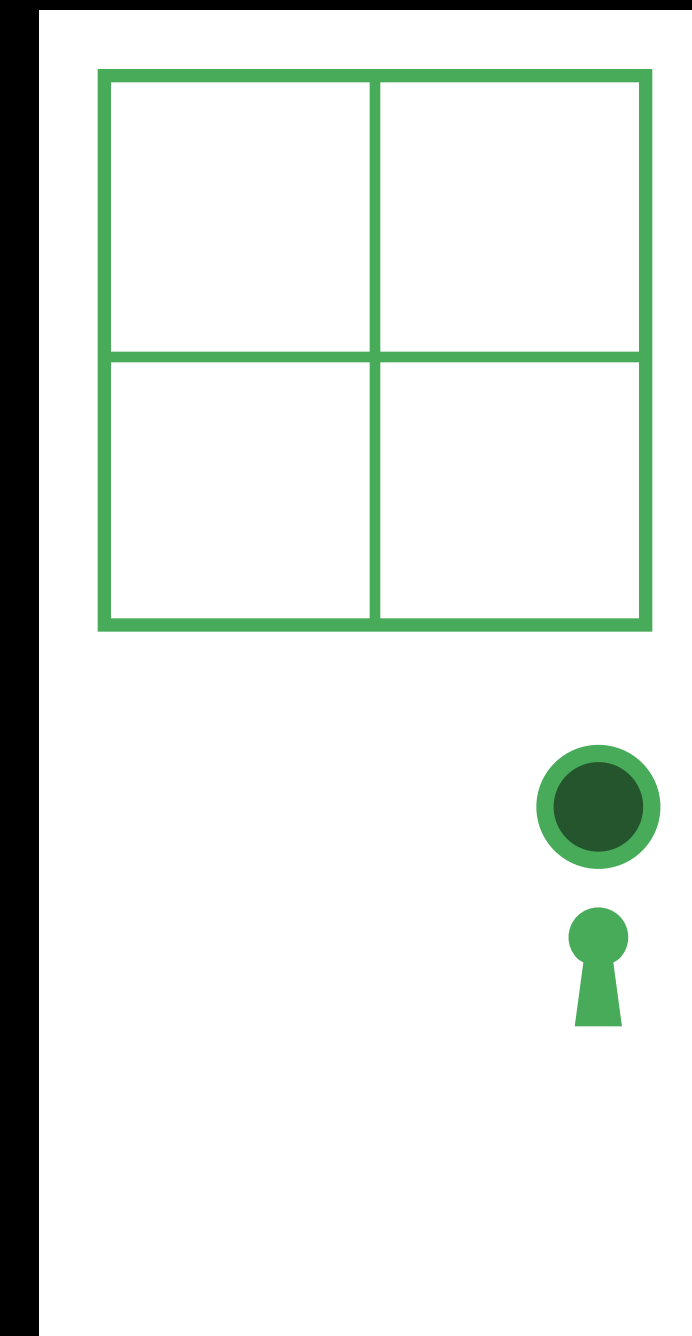
# Event Triggers

## Events

NEW

Events activate a trigger

- State of an accessory



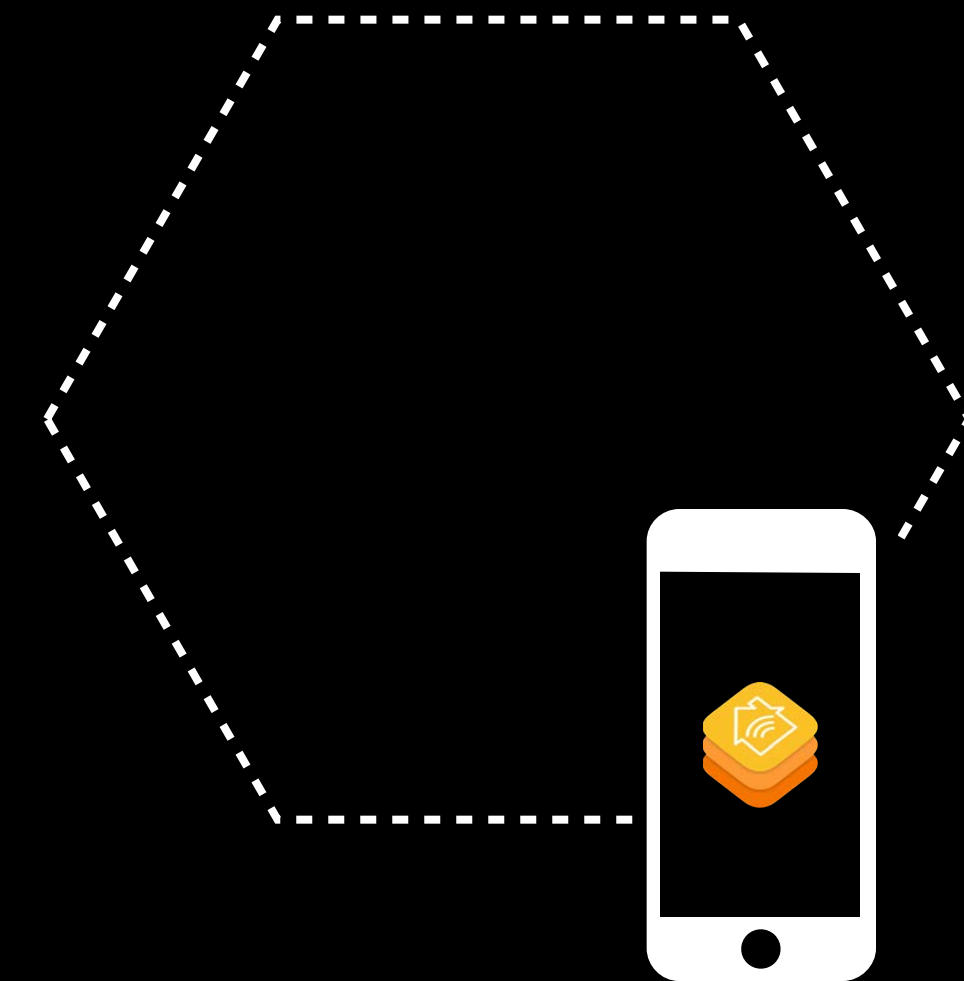
# Event Triggers

## Events

NEW

Events activate a trigger

- State of an accessory
- Geofence



# Event Triggers

HMEvent

```
class HMCharacteristicEvent : HMEvent {  
    init(characteristic: HMCharacteristic, triggerValue: NSCopying)  
}
```

# Event Triggers

HMEvent

```
class HMCharacteristicEvent : HMEvent {  
    init(characteristic: HMCharacteristic, triggerValue: NSCopying)  
}
```

# Event Triggers

HMEvent

```
class HMCharacteristicEvent : HMEvent {  
    init(characteristic: HMCharacteristic, triggerValue: NSCopying)  
}
```

```
class HMLocationEvent : HMEvent {  
    init(region: CLRegion)  
}
```

# Event Triggers

HMEvent

```
class HMCharacteristicEvent : HMEvent {  
    init(characteristic: HMCharacteristic, triggerValue: NSCopying)  
}
```

```
class HMLocationEvent : HMEvent {  
    init(region: CLRegion)  
}
```

# Event Triggers

## HMCharacteristicEvent

```
let frontDoorUnlockedEvent = HMCharacteristicEvent(characteristic:  
    frontDoorCurrentStateCharacteristic,  
    triggerValue:HMCharacteristicValue.DoorStateOpen)
```



# Event Triggers

## HMCharacteristicEvent

```
let frontDoorUnlockedEvent = HMCharacteristicEvent(characteristic:  
    frontDoorCurrentStateCharacteristic,  
    triggerValue:HMCharacteristicValue.DoorStateOpen)
```

# Event Triggers

## Conditions

# Event Triggers

Conditions

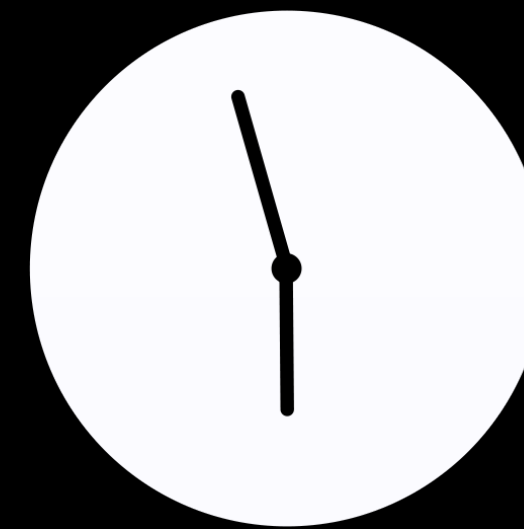
Gate execution of scenes

# Event Triggers

## Conditions

Gate execution of scenes

- Time-based

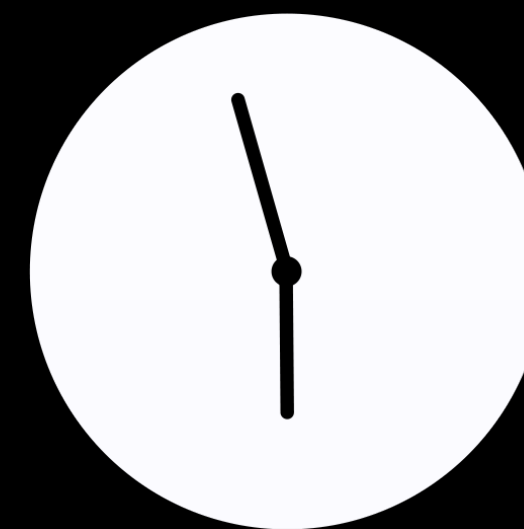


# Event Triggers

## Conditions

Gate execution of scenes

- Time-based
- State of an accessory

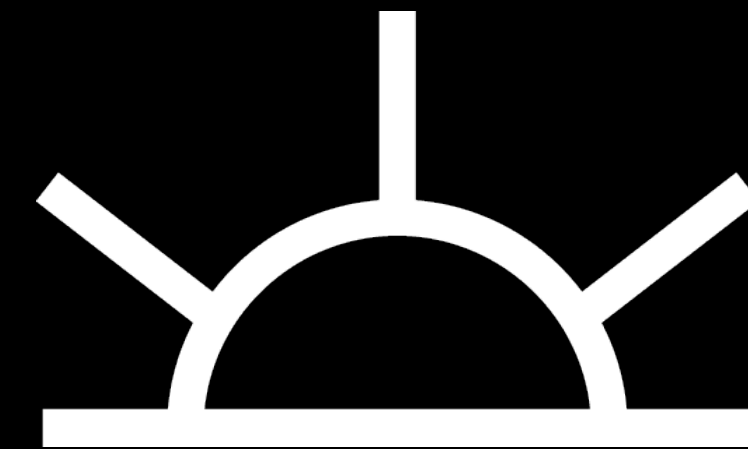
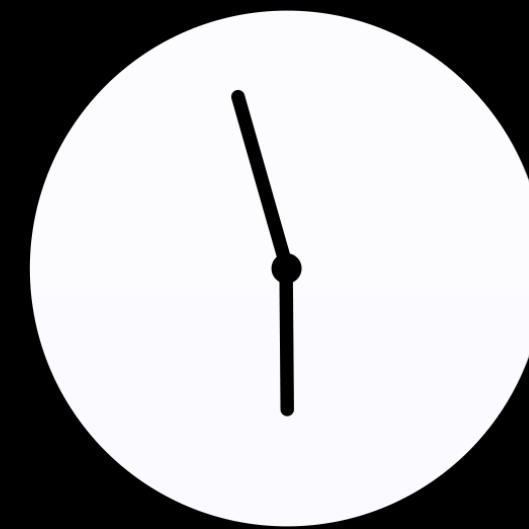


# Event Triggers

## Conditions

Gate execution of scenes

- Time-based
- State of an accessory
- Significant events
  - Sunrise
  - Sunset



# Event Triggers

Conditions–time

```
class HMEventTrigger : HMTrigger {  
    class func predicateForEvaluatingTriggerOccurringBeforeDateWithComponents  
        (dateComponents: NSDateComponents) -> NSPredicate  
  
}
```

# Event Triggers

Conditions–time

```
class HMEventTrigger : HMTrigger {  
    class func predicateForEvaluatingTriggerOccurringBeforeDateWithComponents  
        (dateComponents: NSDateComponents) -> NSPredicate  
  
}
```



# Event Triggers

## Conditions–time

```
class HMEventTrigger : HMTrigger {  
    class func predicateForEvaluatingTriggerOccurringBeforeDateWithComponents  
        (dateComponents: NSDateComponents) -> NSPredicate  
  
    class func predicateForEvaluatingTriggerOccurringAfterDateWithComponents  
        (dateComponents: NSDateComponents) -> NSPredicate  
  
}
```

# Event Triggers

## Conditions–time

```
class HMEventTrigger : HMTrigger {  
    class func predicateForEvaluatingTriggerOccurringBeforeDateWithComponents  
        (dateComponents: NSDateComponents) -> NSPredicate  
  
    class func predicateForEvaluatingTriggerOccurringAfterDateWithComponents  
        (dateComponents: NSDateComponents) -> NSPredicate  
  
}
```

# Event Triggers

## Conditions–time

```
class HMEventTrigger : HMTrigger {  
    class func predicateForEvaluatingTrigger0ccurringBeforeDateWithComponents  
        (dateComponents: NSDateComponents) -> NSPredicate  
  
    class func predicateForEvaluatingTrigger0ccurringAfterDateWithComponents  
        (dateComponents: NSDateComponents) -> NSPredicate  
  
    class func predicateForEvaluatingTrigger0ccurringOnDateWithComponents  
        (dateComponents: NSDateComponents) -> NSPredicate  
}
```

# Event Triggers

## Conditions–time

```
class HMEventTrigger : HMTrigger {  
    class func predicateForEvaluatingTrigger0ccurringBeforeDateWithComponents  
        (dateComponents: NSDateComponents) -> NSPredicate  
  
    class func predicateForEvaluatingTrigger0ccurringAfterDateWithComponents  
        (dateComponents: NSDateComponents) -> NSPredicate  
  
    class func predicateForEvaluatingTrigger0ccurringOnDateWithComponents  
        (dateComponents: NSDateComponents) -> NSPredicate  
}
```

# Event Triggers

Conditions–time

# Event Triggers

Conditions–time

```
let before6PM = NSDateComponents()  
before6PM.hour = 18
```

# Event Triggers

## Conditions–time

```
let before6PM = NSDateComponents()  
before6PM.hour = 18
```

```
let before6PMPredicate = HMEventTrigger.  
predicateForEvaluatingTriggerOccurringBeforeDateWithComponents(before6PM)
```

# Event Triggers

## Conditions–time

```
let before6PM = NSDateComponents()  
before6PM.hour = 18
```

```
let before6PMPredicate = HMEventTrigger.  
predicateForEvaluatingTriggerOccurringBeforeDateWithComponents(before6PM)
```



# Event Triggers

Conditions—accessory state

```
class HMEventTrigger : HMTrigger {  
    class func predicateForEvaluatingTriggerWithCharacteristic  
        (characteristic: HMCharacteristic,  
         matchingValue: AnyObject) -> NSPredicate  
}
```

# Event Triggers

Conditions—accessory state

```
class HMEventTrigger : HMTrigger {  
    class func predicateForEvaluatingTriggerWithCharacteristic  
        (characteristic: HMCharacteristic,  
         matchingValue: AnyObject) -> NSPredicate  
}
```

# Event Triggers

Conditions—accessory state

```
let motionDetectedPredicate = HMEventTrigger.  
predicateForEvaluatingTriggerWithCharacteristic(characteristic:  
    frontDoorMotionSensorCharacteristic,  
    matchingValue:true)
```

# Event Triggers

Conditions—accessory state

```
let motionDetectedPredicate = HMEventTrigger.  
predicateForEvaluatingTriggerWithCharacteristic(characteristic:  
    frontDoorMotionSensorCharacteristic,  
    matchingValue:true)
```

# Event Triggers

Conditions—significant events in a day

```
class HMEventTrigger : HMTrigger {  
    class func predicateForEvaluatingTriggerOccurringBeforeSignificantEvent  
        (significantEvent: String,  
         applyingOffset: NSDateComponents?) -> NSPredicate  
  
}
```

# Event Triggers

Conditions—significant events in a day

```
class HMEventTrigger : HMTrigger {  
    class func predicateForEvaluatingTriggerOccurringBeforeSignificantEvent  
        (significantEvent: String,  
         applyingOffset: NSDateComponents?) -> NSPredicate  
  
}
```

# Event Triggers

Conditions—significant events in a day

```
class HMEventTrigger : HMTrigger {  
    class func predicateForEvaluatingTriggerOccurringBeforeSignificantEvent  
        (significantEvent: String,  
         applyingOffset: NSDateComponents?) -> NSPredicate  
  
    class func predicateForEvaluatingTriggerOccurringAfterSignificantEvent  
        (significantEvent: String,  
         applyingOffset: NSDateComponents?) -> NSPredicate  
}
```

# Event Triggers

Conditions—significant events in a day

```
class HMEventTrigger : HMTrigger {  
    class func predicateForEvaluatingTrigger0ccurringBeforeSignificantEvent  
        (significantEvent: String,  
         applyingOffset: NSDateComponents?) -> NSPredicate  
  
    class func predicateForEvaluatingTrigger0ccurringAfterSignificantEvent  
        (significantEvent: String,  
         applyingOffset: NSDateComponents?) -> NSPredicate  
}
```



# Event Triggers

Conditions—significant events in a day

```
let HMSignificantEventSunrise: String  
let HMSignificantEventSunset: String
```

# Event Triggers

Conditions—significant events in a day

```
let HMSignificantEventSunrise: String  
let HMSignificantEventSunset: String
```

# Event Triggers

Conditions—significant events in a day

```
let HMSignificantEventSunrise: String  
let HMSignificantEventSunset: String
```

```
let offset = NSDateComponents()  
offset.minute = -30
```

# Event Triggers

Conditions—significant events in a day

```
let HMSignificantEventSunrise: String  
let HMSignificantEventSunset: String
```

```
let offset = NSDateComponents()  
offset.minute = -30
```

# Event Triggers

Conditions—significant events in a day

```
let HMSignificantEventSunrise: String
```

```
let HMSignificantEventSunset: String
```

```
let offset = NSDateComponents()
```

```
offset.minute = -30
```

```
let thirtyMinutesBeforeSunsetPredicate =
```

```
HMEventTrigger.predicateForEvaluatingTrigger0ccurringBeforeSignificantEvent  
(HMSignificantEventSunset, applyingOffset:offset)
```

# Event Triggers

Conditions—significant events in a day

```
let HMSignificantEventSunrise: String
let HMSignificantEventSunset: String
```

```
let offset = NSDateComponents()
offset.minute = -30
```

```
let thirtyMinutesBeforeSunsetPredicate =
HMEventTrigger.predicateForEvaluatingTrigger0ccurringBeforeSignificantEvent
(HMSignificantEventSunset, applyingOffset:offset)
```

# Event Triggers

## HMEventTrigger

```
class HMEventTrigger : HMTrigger {  
    init(name: String,  
          events:[HMEvent],  
          predicate: NSPredicate?)  
}
```

# Event Triggers

## HMEventTrigger

```
class HMEventTrigger : HMTrigger {  
    init(name: String,  
          events:[HMEvent],  
          predicate: NSPredicate?)  
}
```



# Event Triggers

HMEventTrigger

```
let predicate = NSCompoundPredicate.andPredicateWithSubpredicates  
                ([before6PMPredicate, motionDetectedPredicate])
```

# Event Triggers

HMEventTrigger

```
let predicate = NSCompoundPredicate.andPredicateWithSubpredicates  
                ([before6PMPredicate, motionDetectedPredicate])
```

# Event Triggers

## HMEventTrigger

```
let predicate = NSCompoundPredicate.andPredicateWithSubpredicates  
                ([before6PMPredicate, motionDetectedPredicate])  
  
let eventTrigger = HMEventTrigger("Arrived Home",  
                                   events:[frontDoorUnlockedEvent], predicate:predicate)
```

# Event Triggers

## HMEventTrigger

```
let predicate = NSCompoundPredicate.andPredicateWithSubpredicates  
                ([before6PMPredicate, motionDetectedPredicate])
```

```
let eventTrigger = HMEventTrigger("Arrived Home",  
                                  events:[frontDoorUnlockedEvent], predicate:predicate)
```

# Event Triggers

## HMEventTrigger

```
let predicate = NSCompoundPredicate.andPredicateWithSubpredicates
    ([before6PMPredicate, motionDetectedPredicate])

let eventTrigger = HMEventTrigger("Arrived Home",
    events:[frontDoorUnlockedEvent], predicate:predicate)

let arrivedHome = home.builtinActionSetOfType(HMActionSetTypeHomeArrival)
eventTrigger.addActionSet(arrivedHome,
    completionHandler:(NSError?) -> Void { error in /* */ })
```

# Event Triggers

## HMEventTrigger

```
let predicate = NSCompoundPredicate.andPredicateWithSubpredicates  
    ([before6PMPredicate, motionDetectedPredicate])
```

```
let eventTrigger = HMEventTrigger("Arrived Home",  
    events:[frontDoorUnlockedEvent], predicate:predicate)
```

```
let arrivedHome = home.builtinActionSetOfType(HMActionSetTypeHomeArrival)  
eventTrigger.addActionSet(arrivedHome,  
    completionHandler:(NSError?) -> Void { error in /* */ })
```

*Demo*

EventTriggers using HomeKitCatalog

# Accessories

Naveen Kommareddi HomeKit Engineer





# Remote Access

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Remote Access

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Bluetooth Low Energy

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Remote Access

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Bluetooth Low Energy

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Accessory Categories

Remote Access

---

Bluetooth Low Energy

---

Accessory Categories

# Remote Access



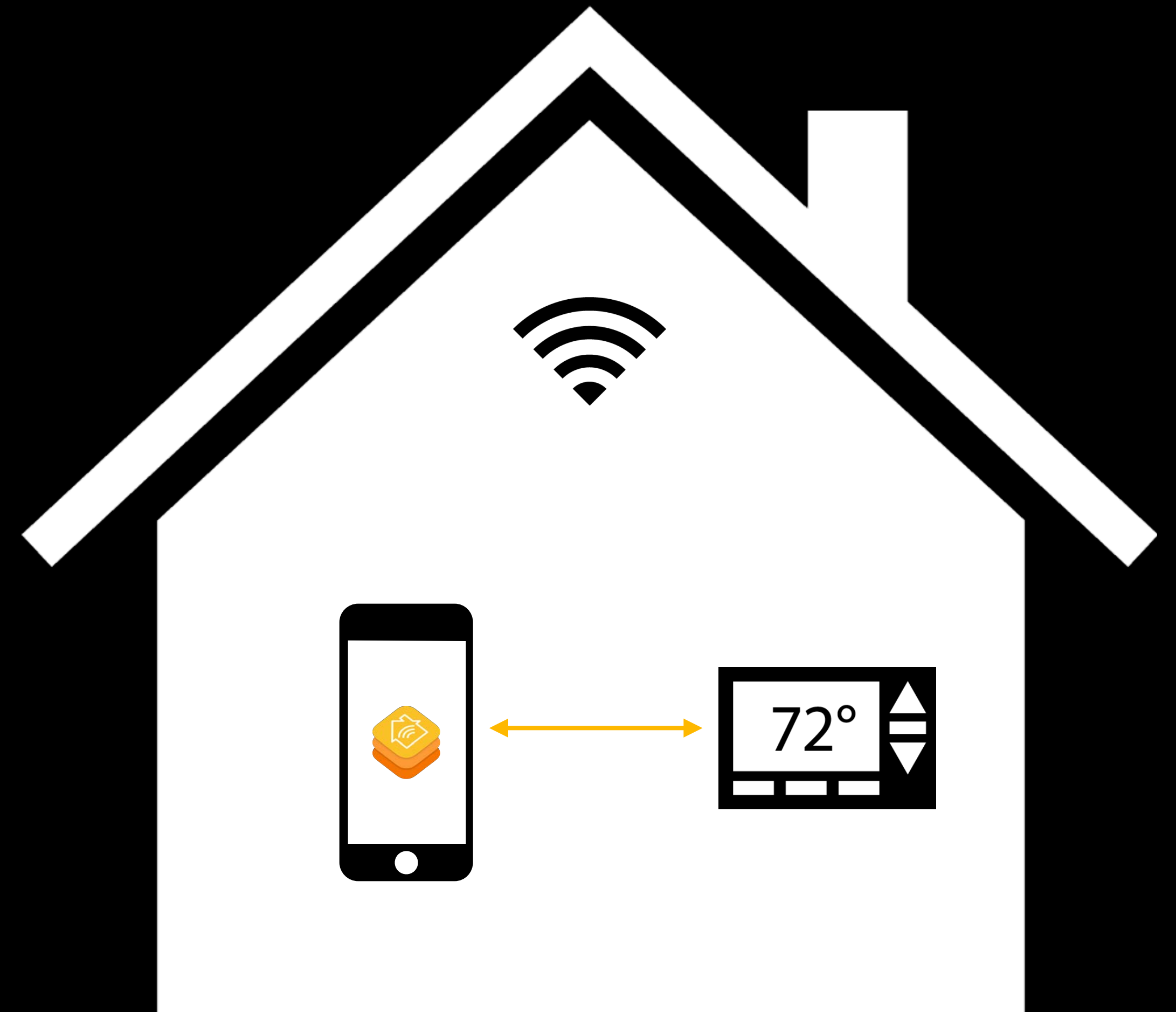
# Remote Access

Control when away from home



# Remote Access

Control when away from home





# Remote Access

Control when away from home



# Remote Access

Control when away from home

Apple TV

- 3rd generation

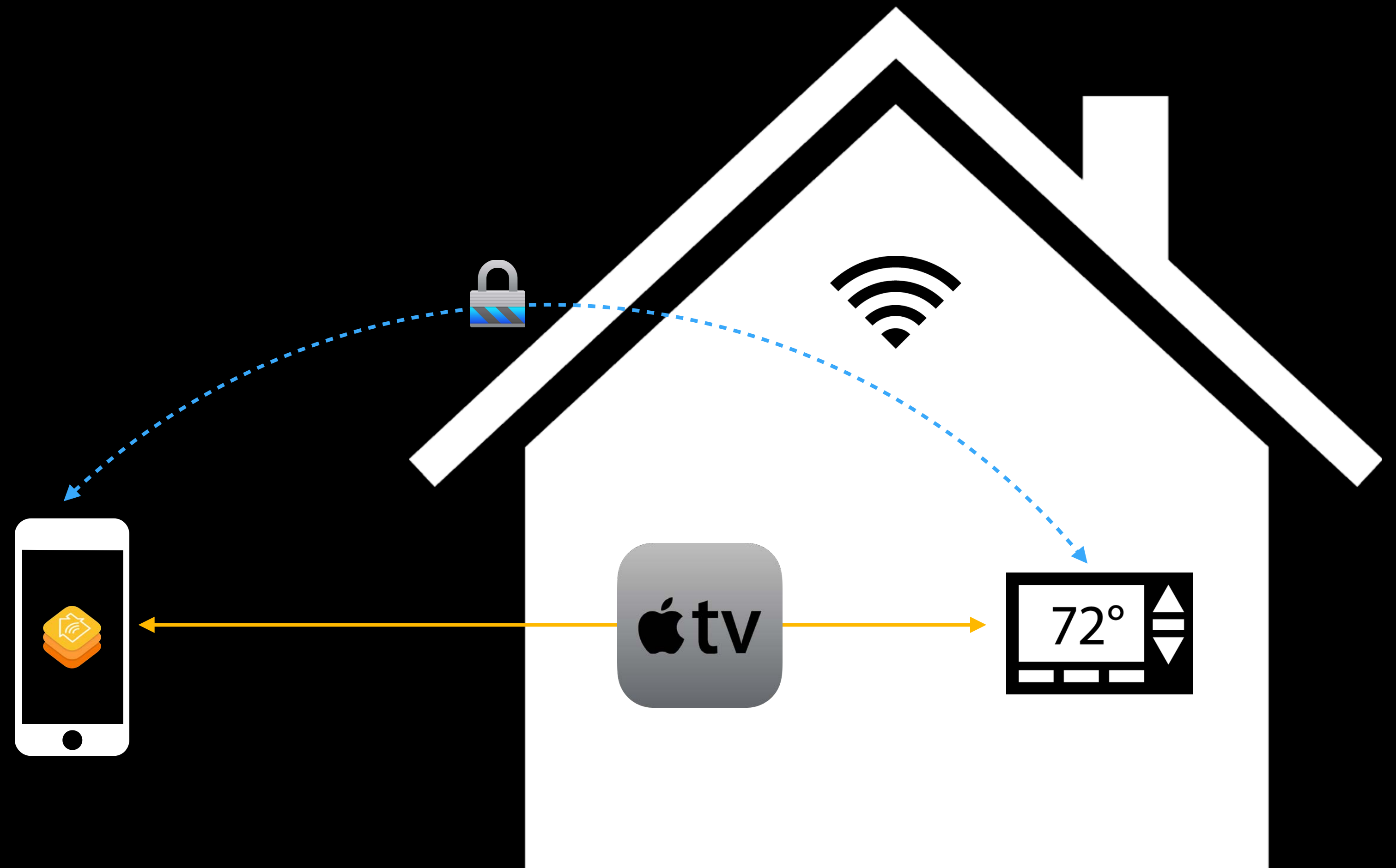


# Remote Access

Control when away from home

Apple TV

- 3rd generation
- Sign in with Apple ID



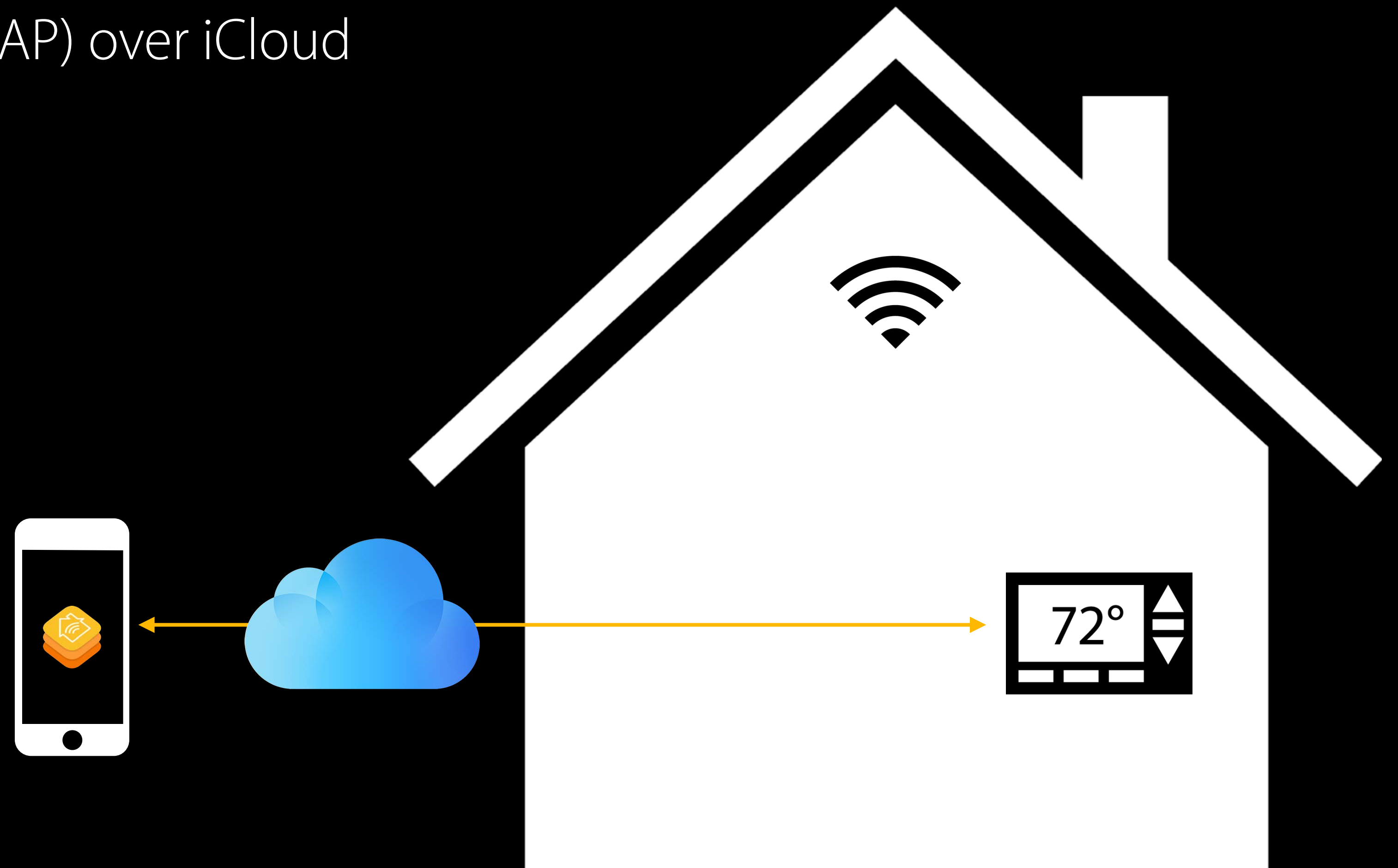
# Remote Access



# Remote Access

NEW

HomeKit Accessory Protocol (HAP) over iCloud

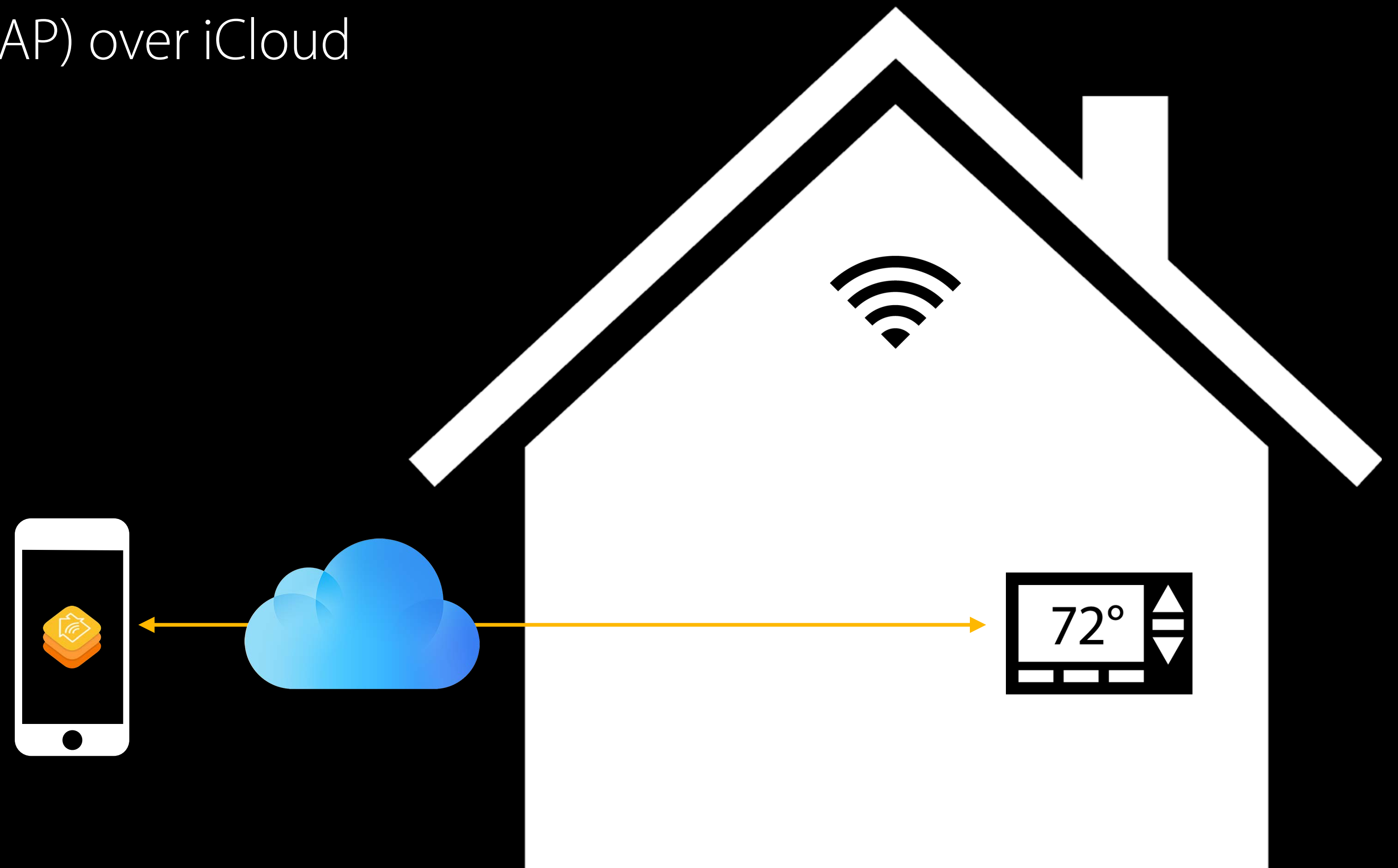


# Remote Access

NEW

HomeKit Accessory Protocol (HAP) over iCloud

- Control and notifications

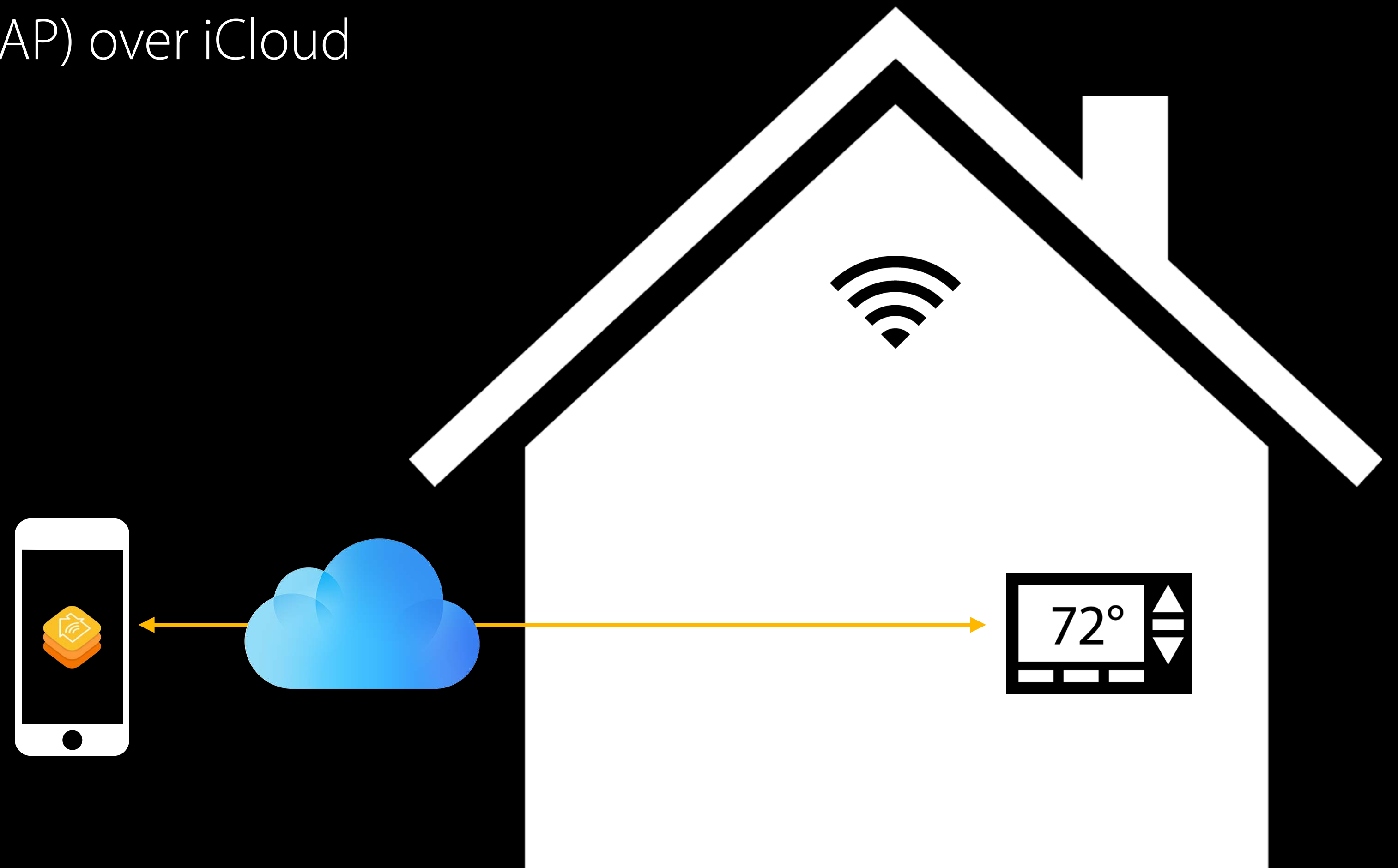


# Remote Access

NEW

HomeKit Accessory Protocol (HAP) over iCloud

- Control and notifications
- Dedicated iCloud service

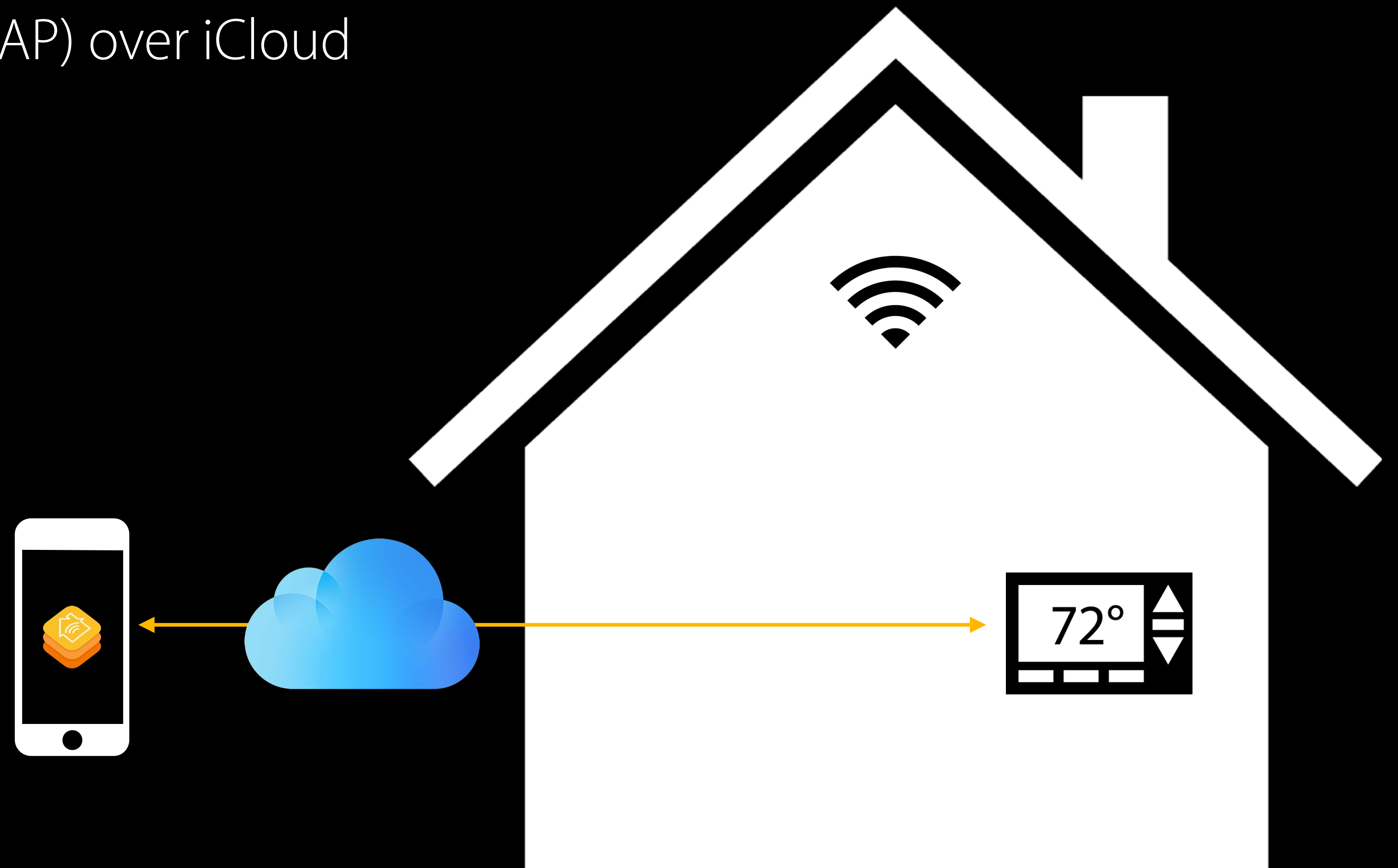


# Remote Access

NEW

## HomeKit Accessory Protocol (HAP) over iCloud

- Control and notifications
- Dedicated iCloud service
- Free



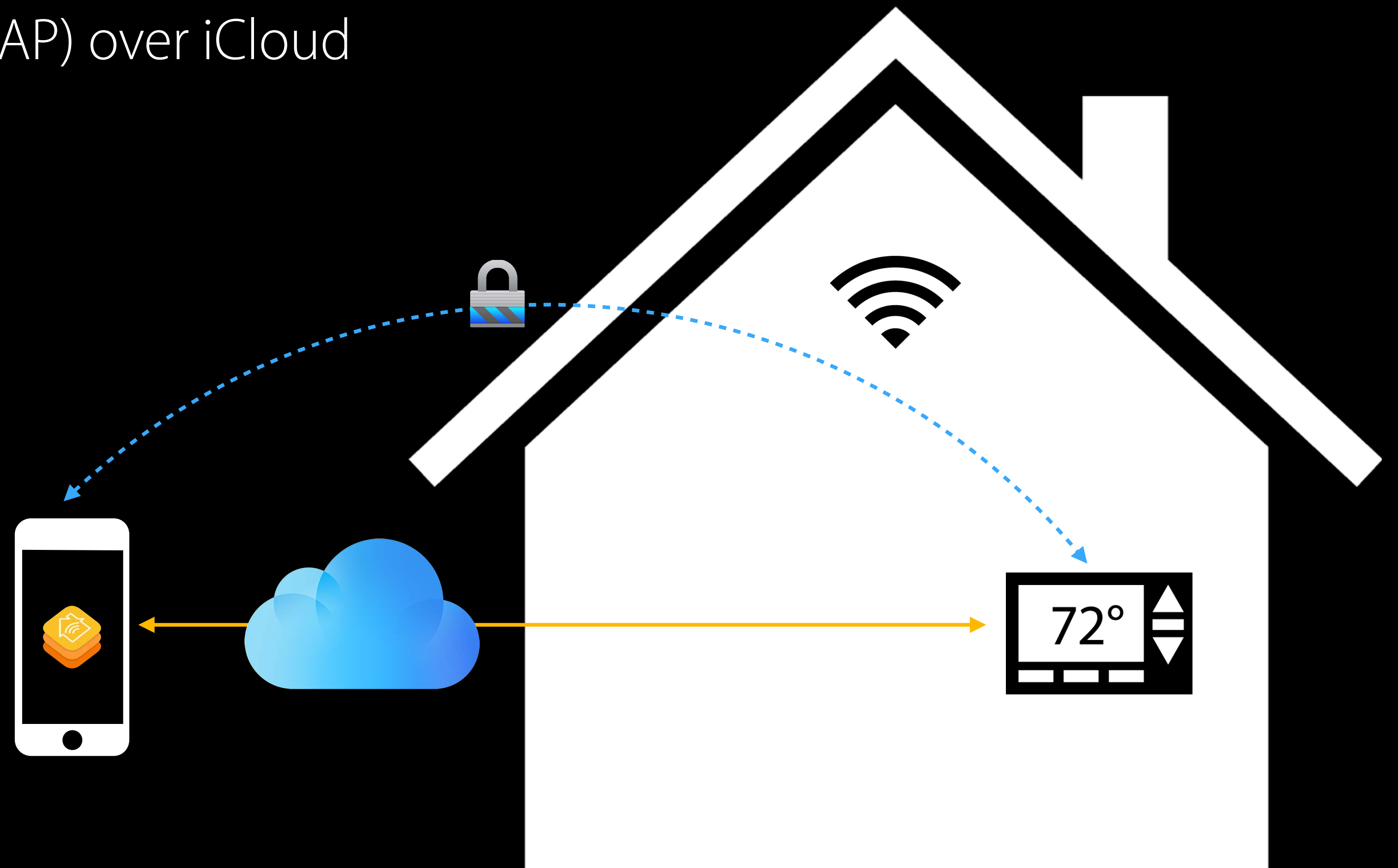


# Remote Access

NEW

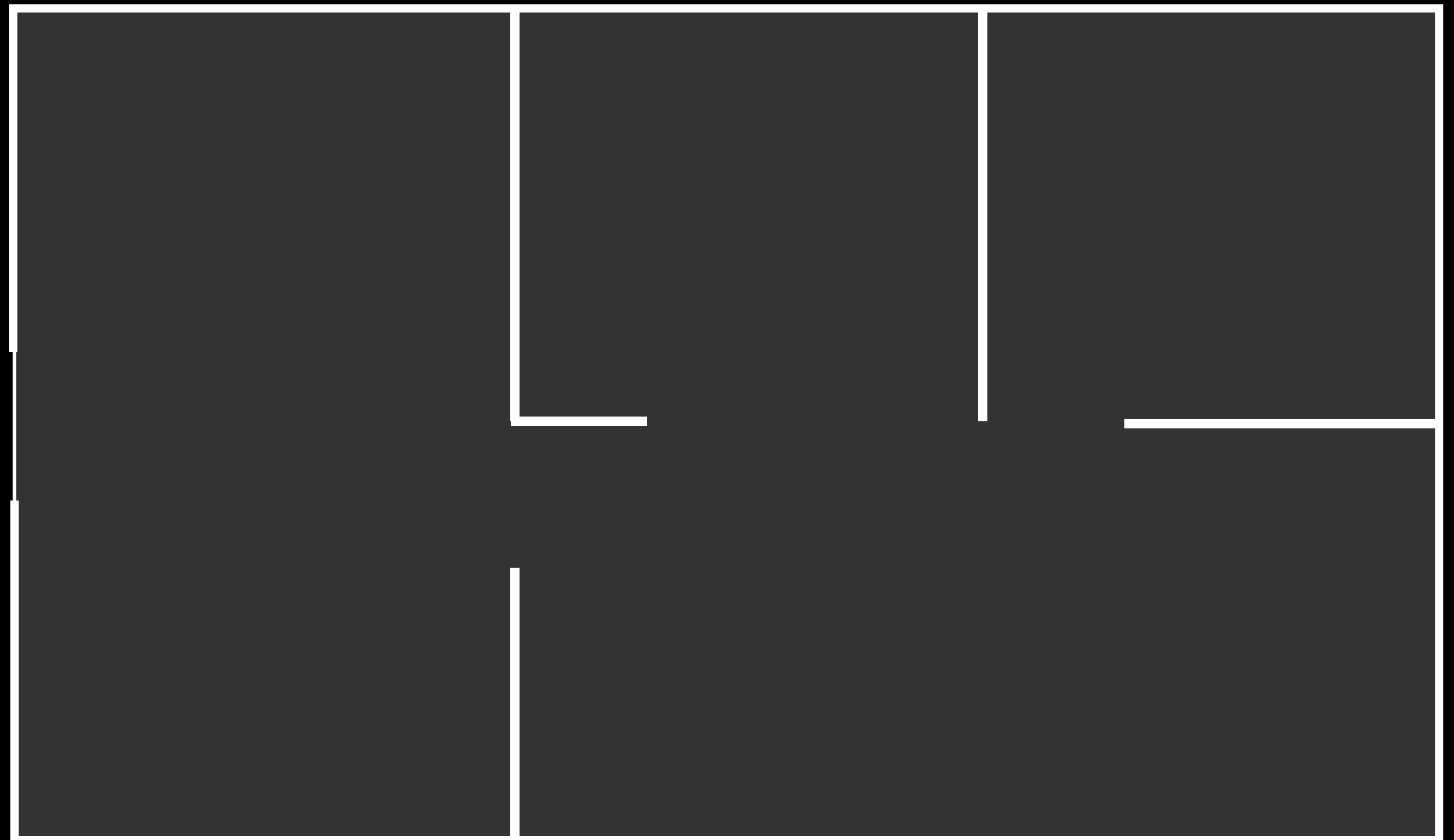
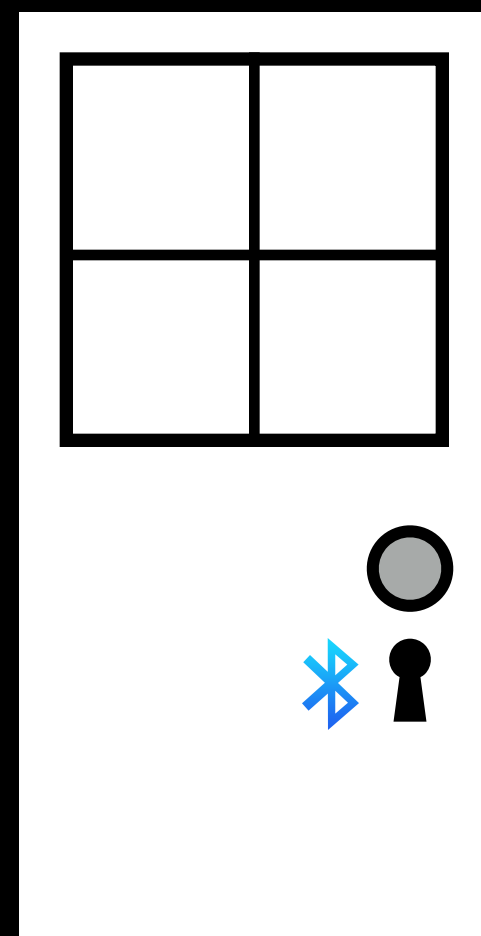
## HomeKit Accessory Protocol (HAP) over iCloud

- Control and notifications
- Dedicated iCloud service
- Free
- Private and secure

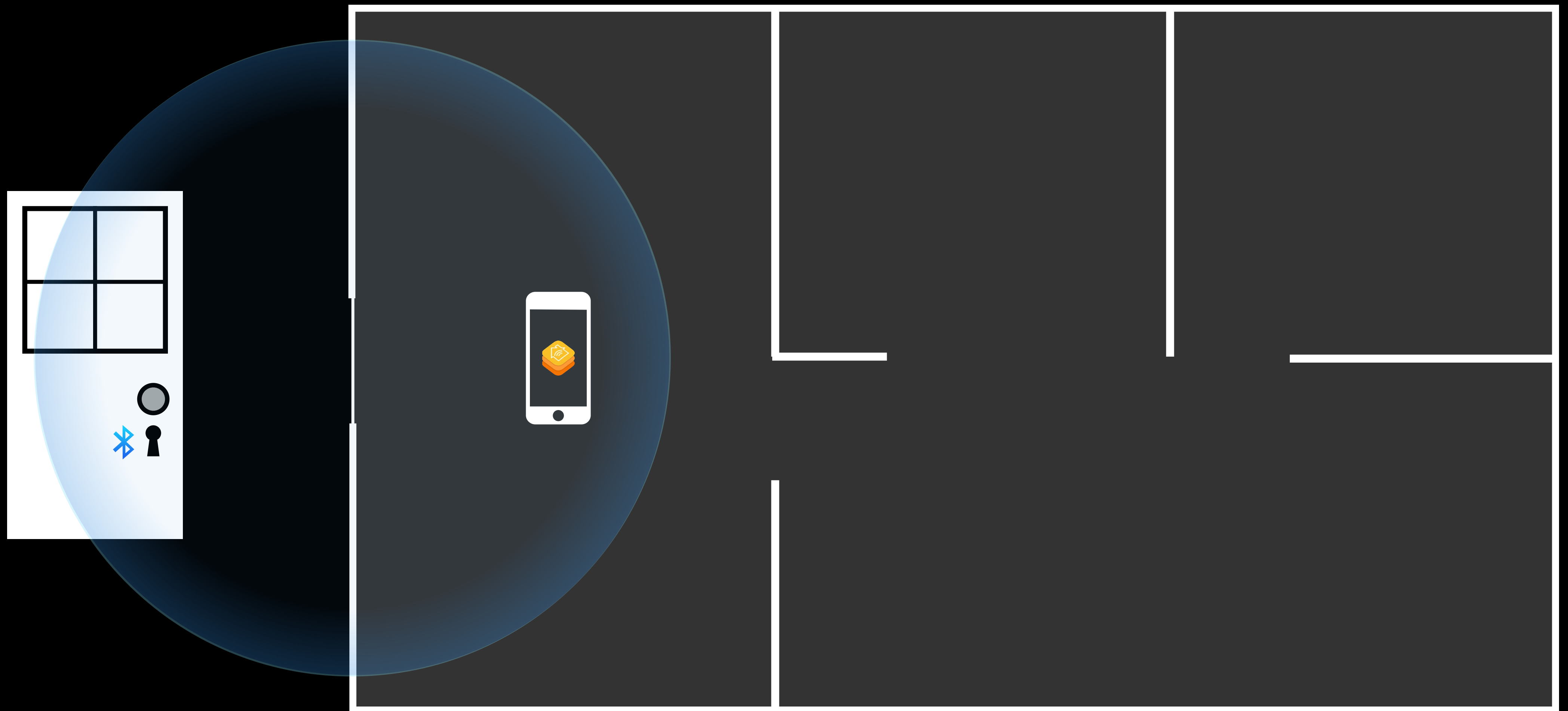


# Bluetooth Low Energy

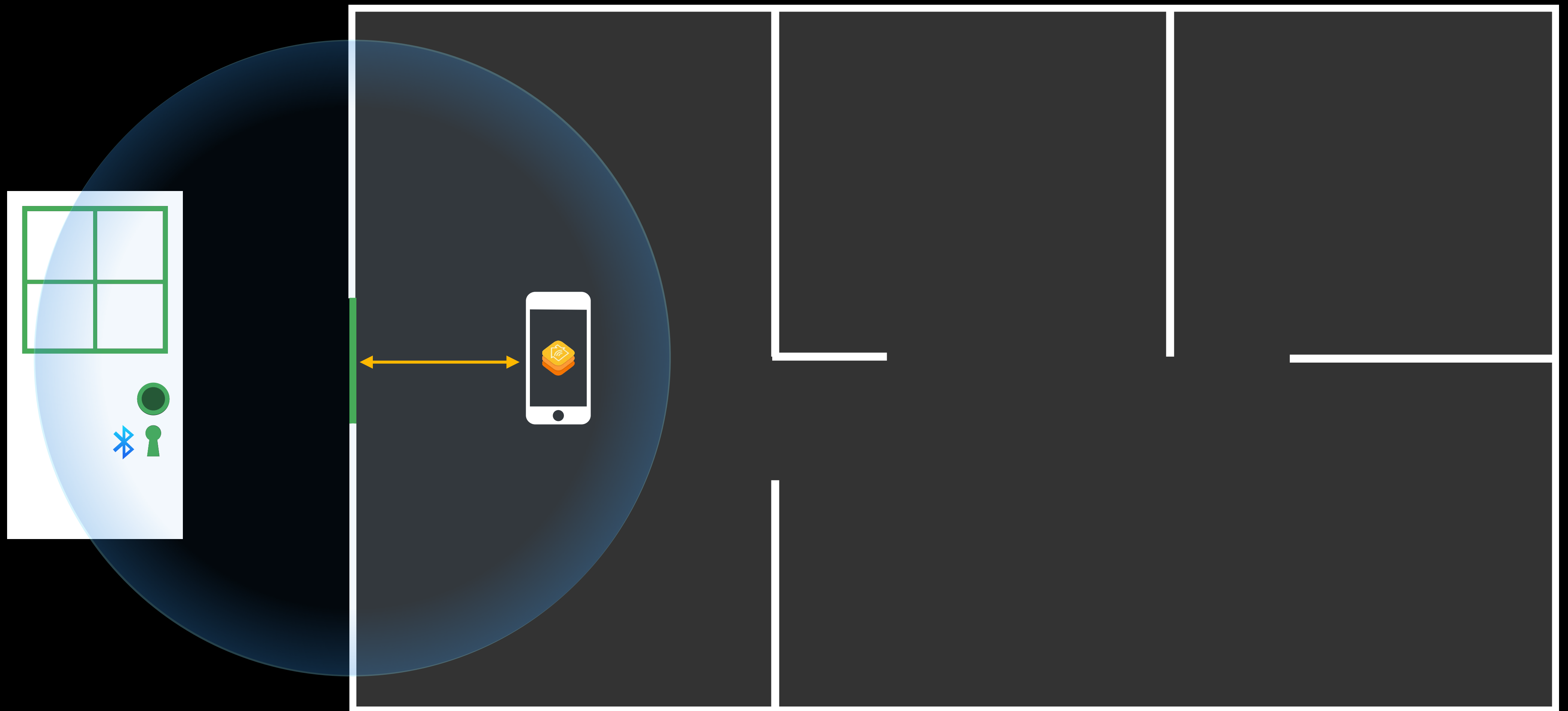
# Bluetooth Low Energy



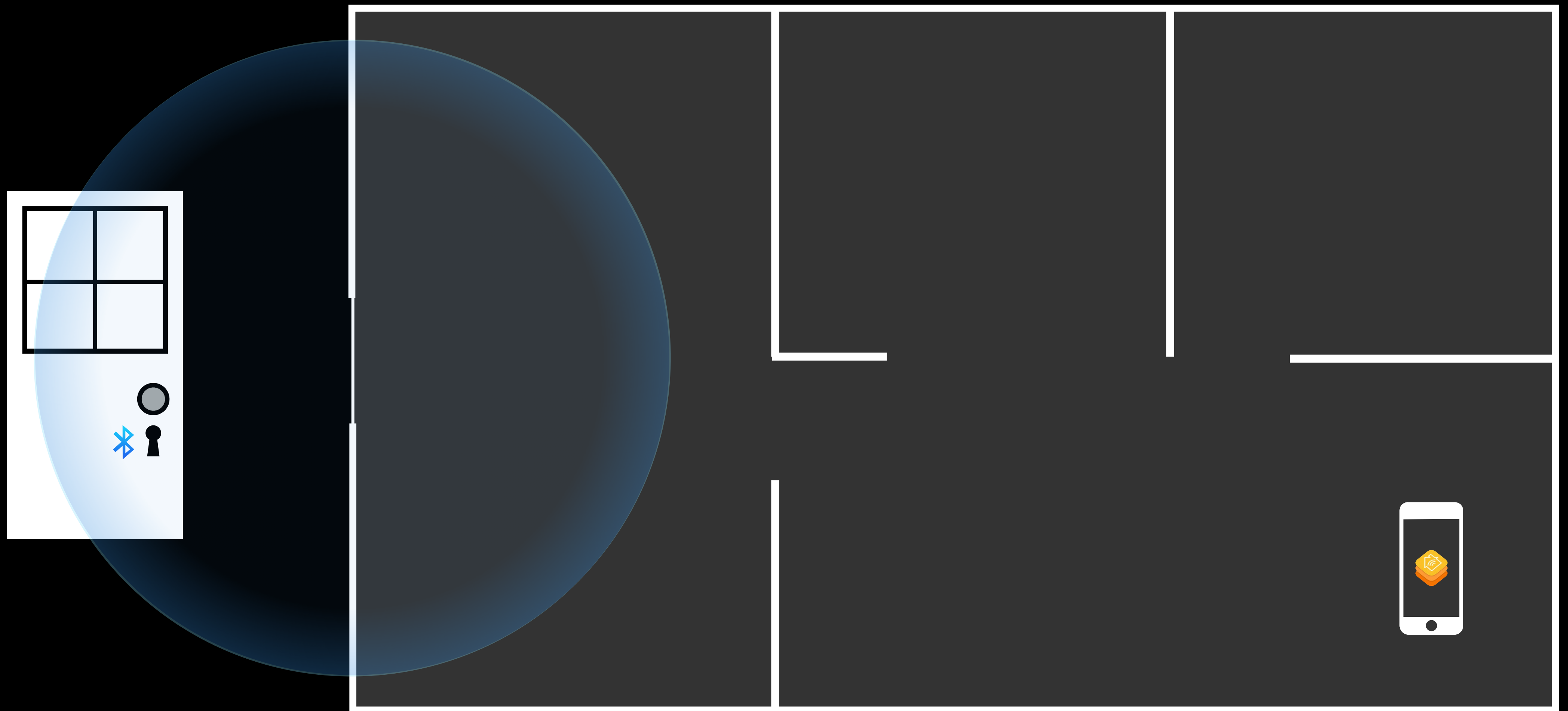
# Bluetooth Low Energy



# Bluetooth Low Energy

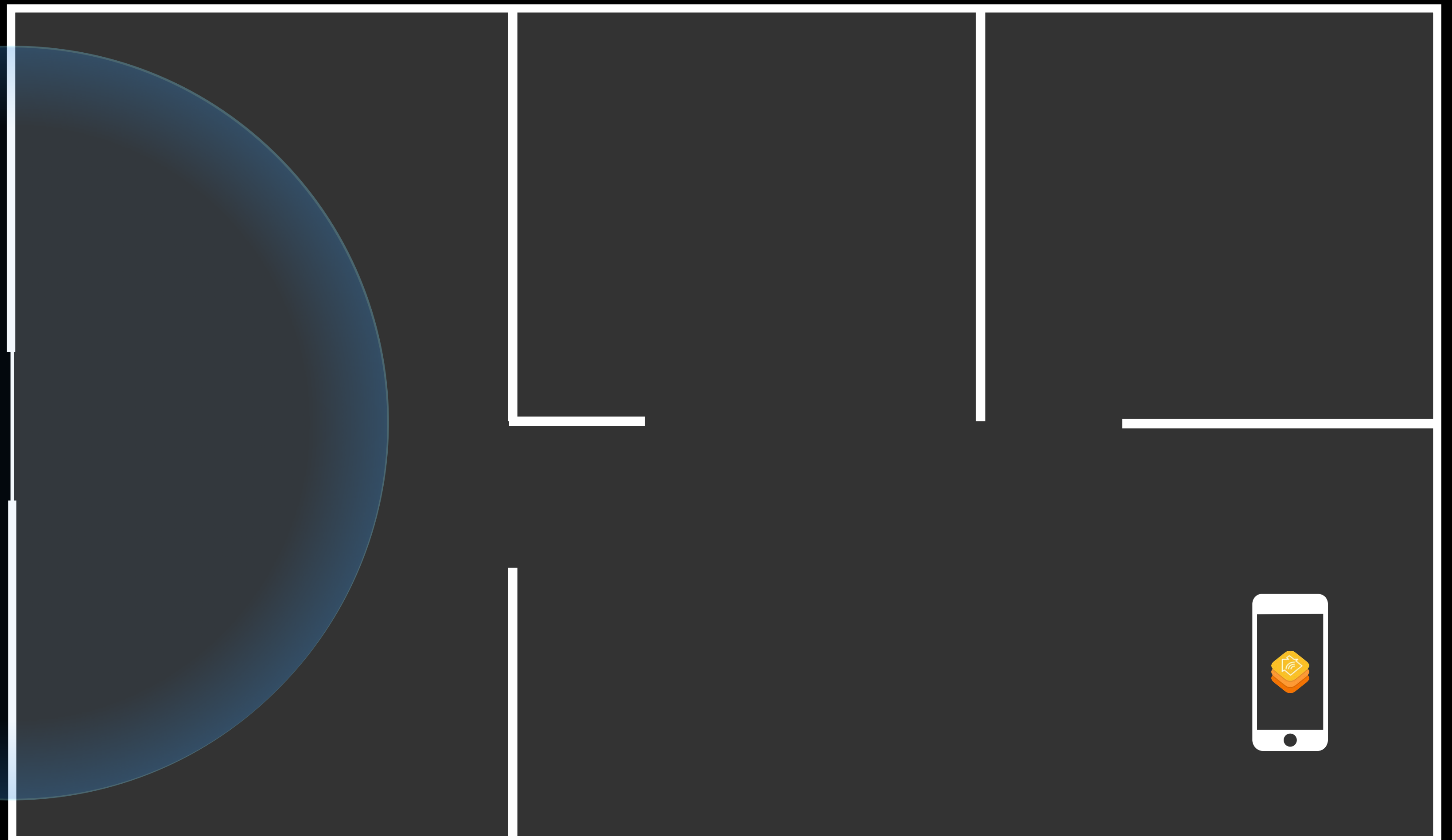
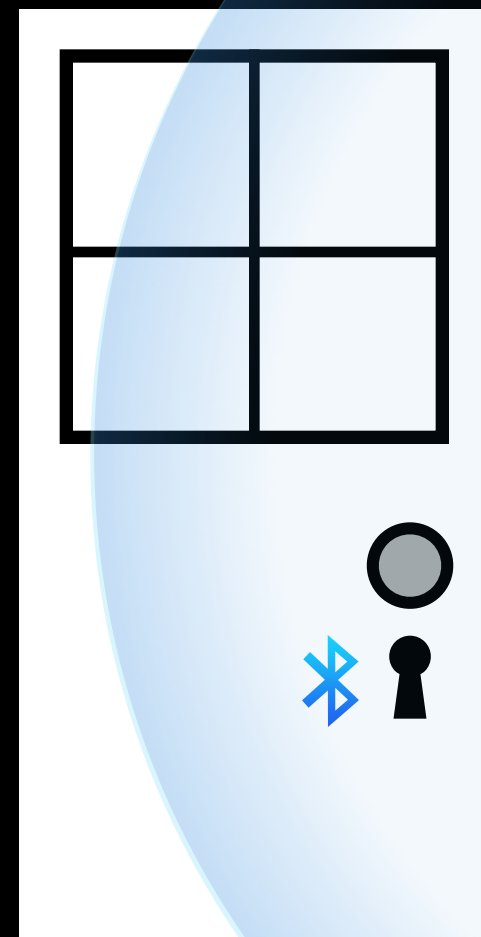


# Bluetooth Low Energy



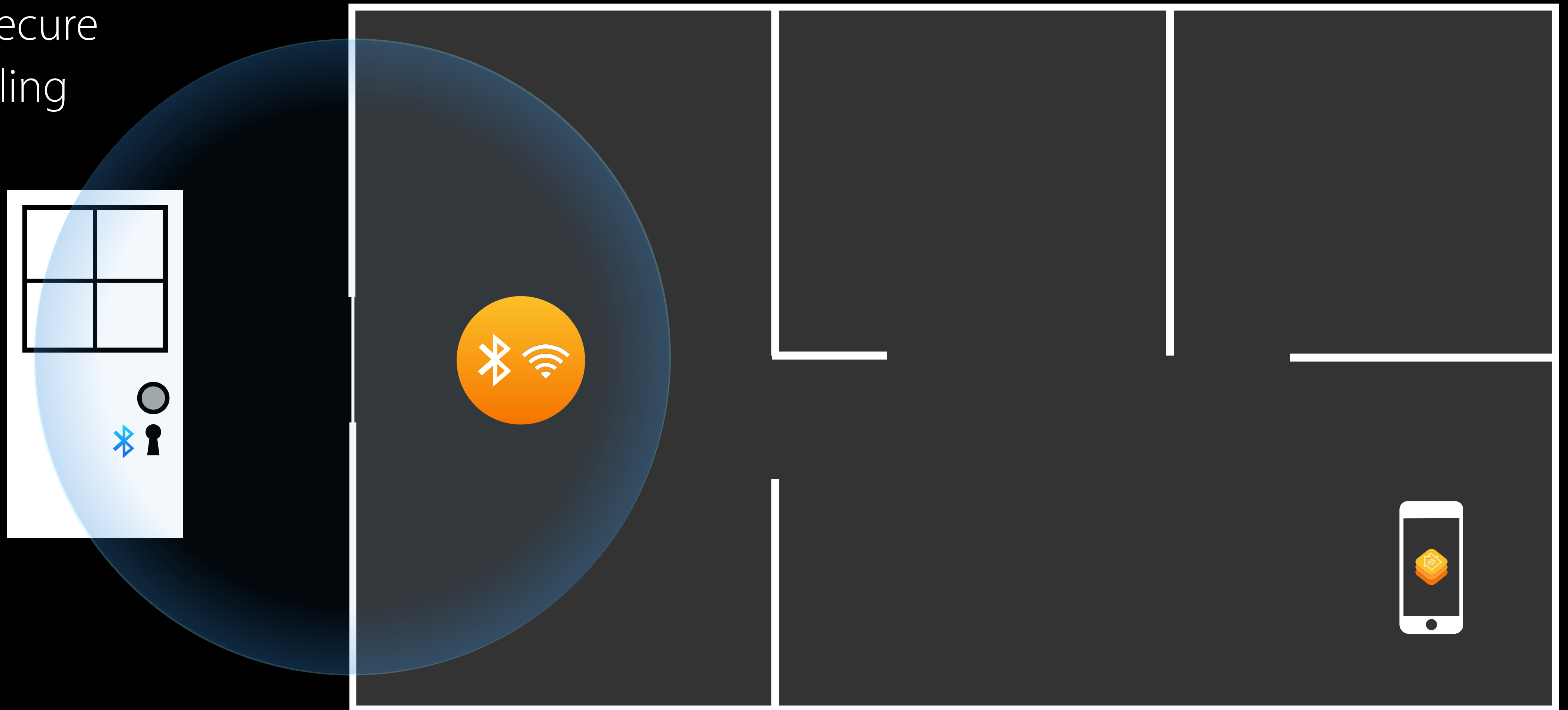
# Bluetooth Low Energy

HAP secure  
tunneling



# Bluetooth Low Energy

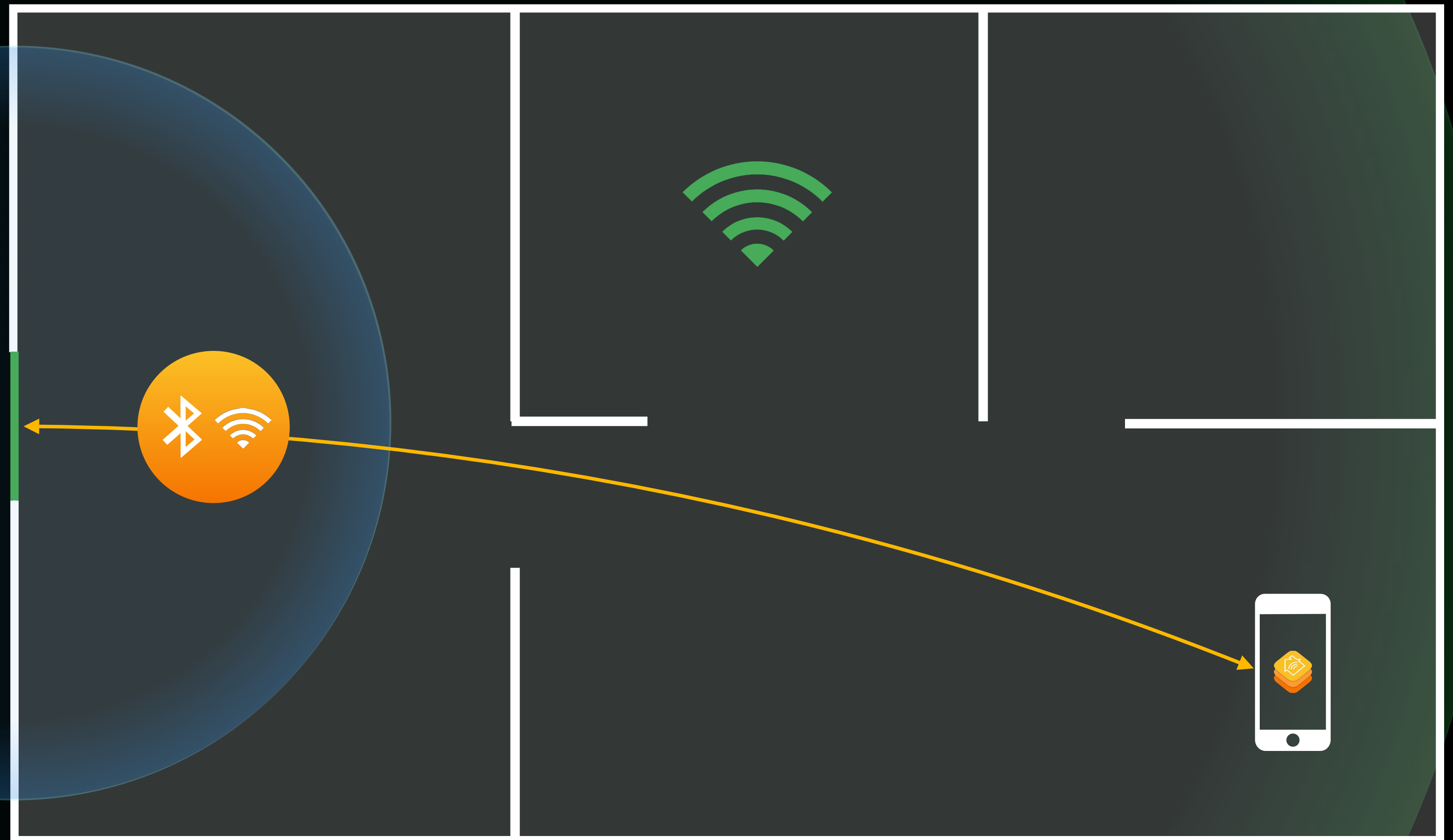
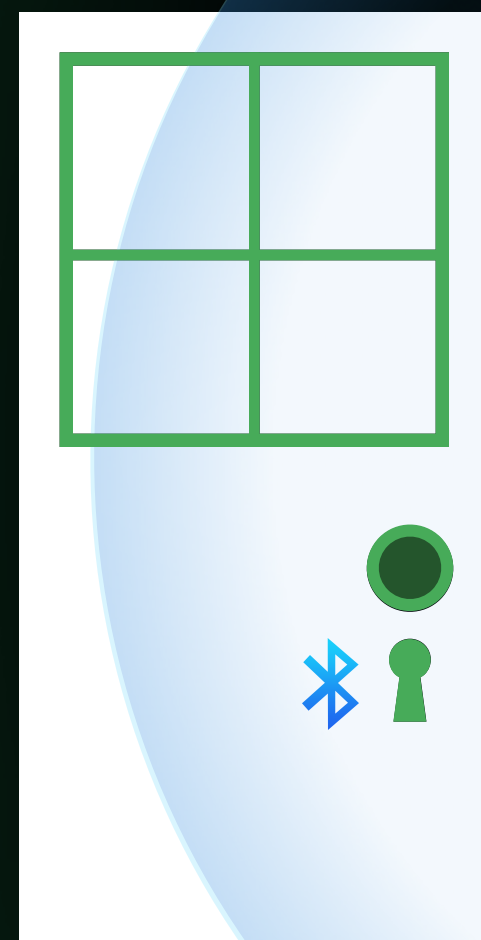
HAP secure  
tunneling





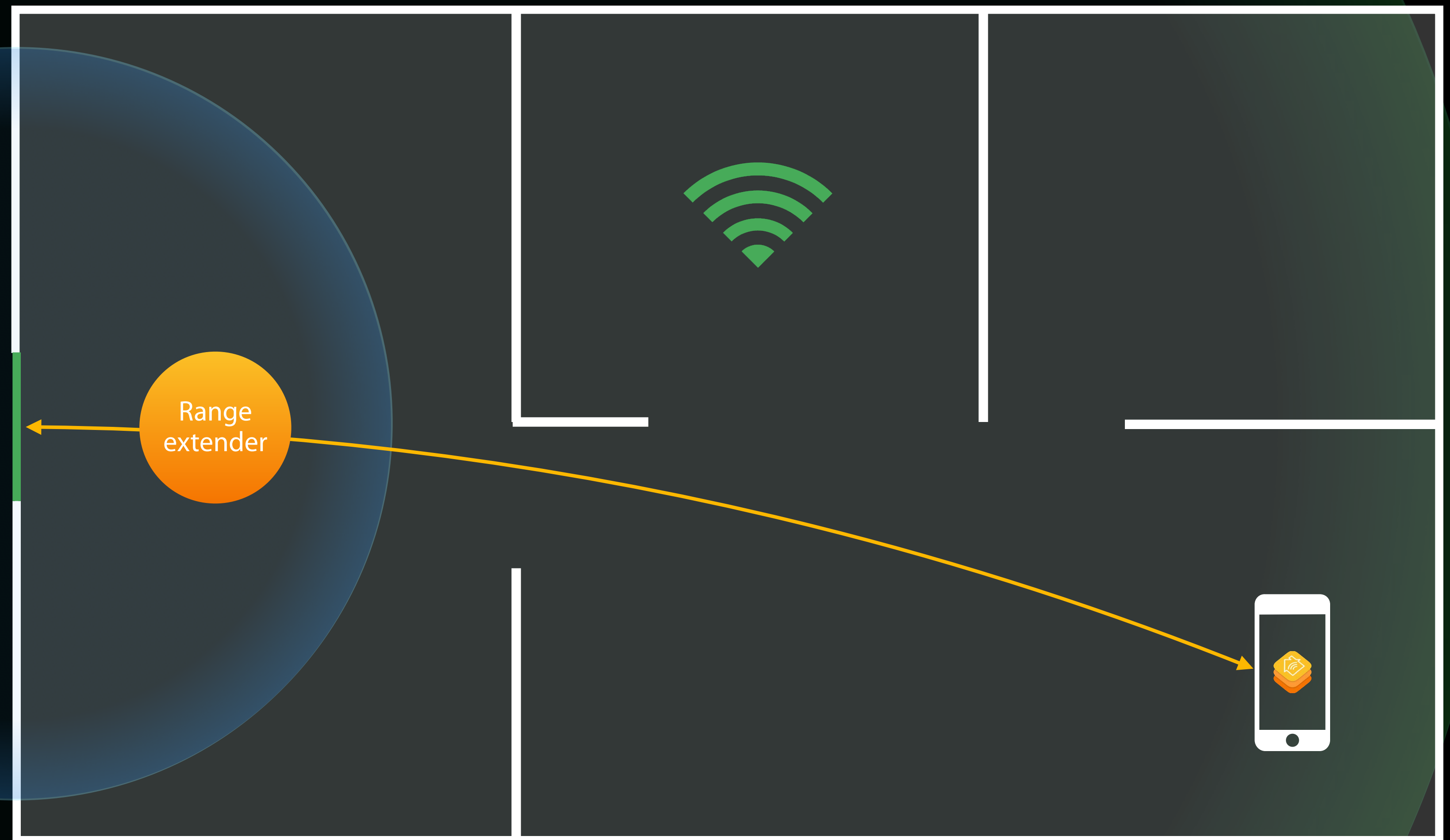
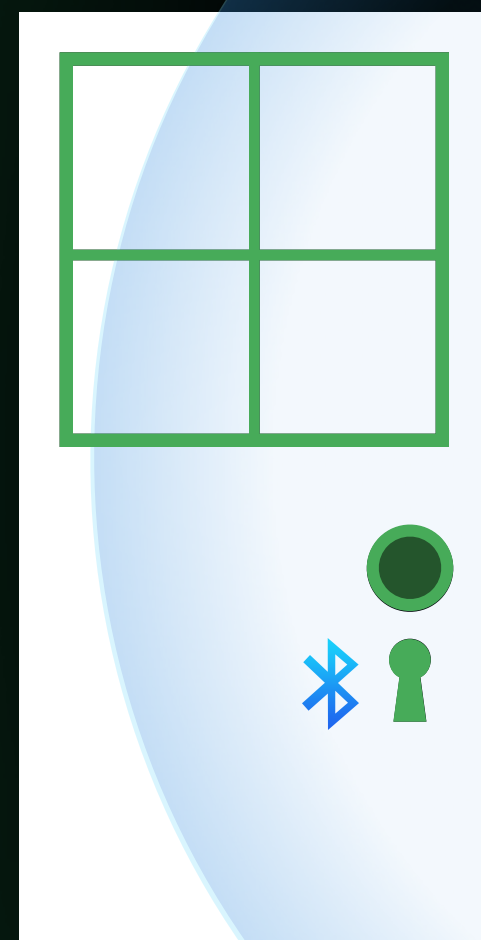
# Bluetooth Low Energy

HAP secure  
tunneling



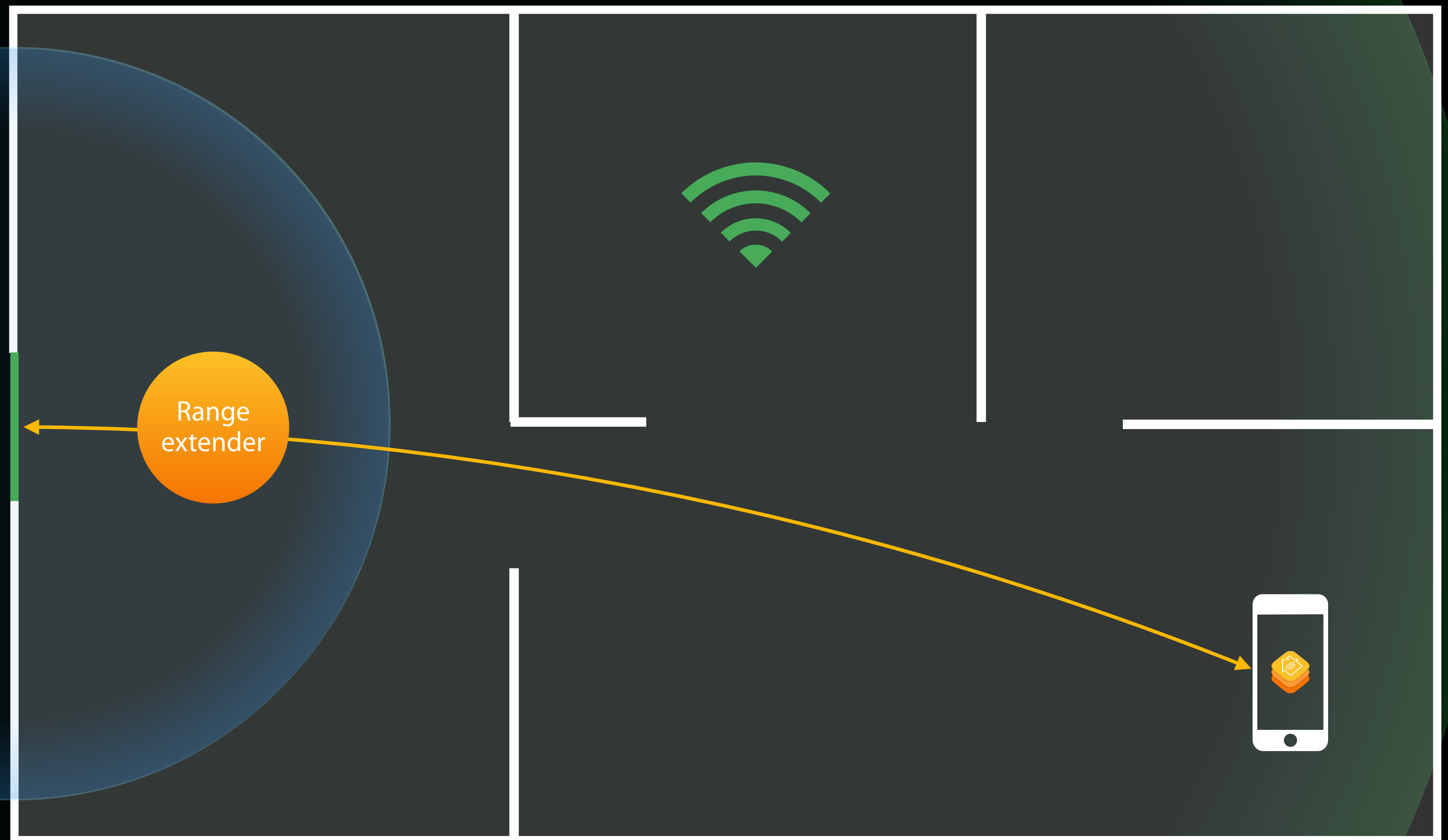
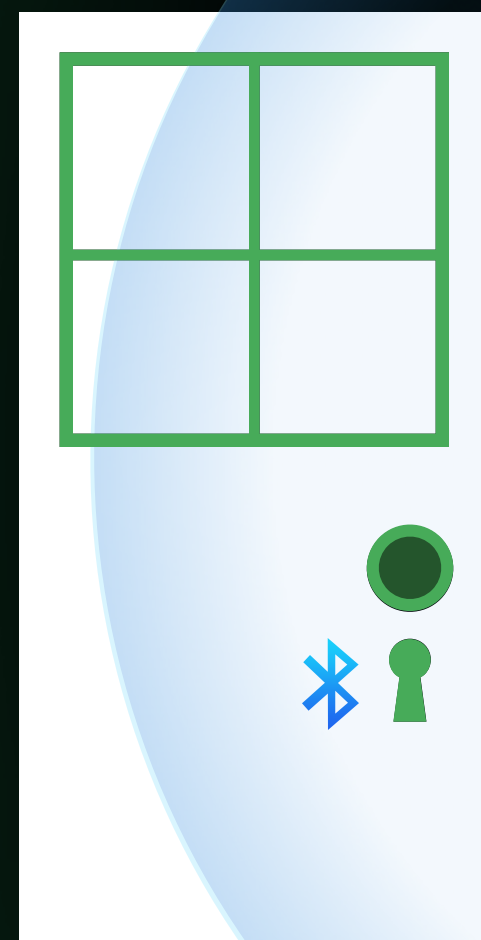
# Bluetooth Low Energy

HAP secure  
tunneling



# Bluetooth Low Energy

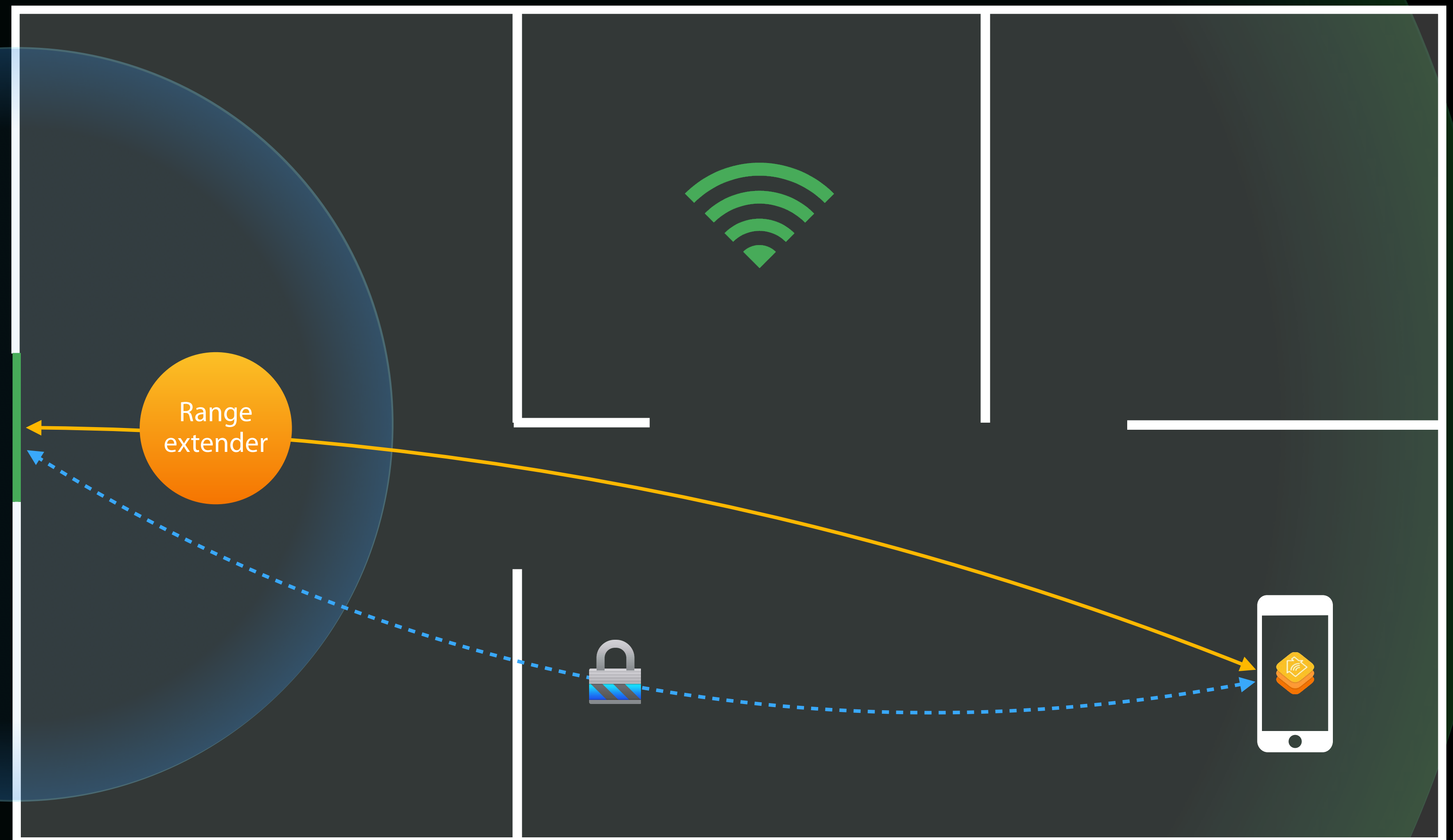
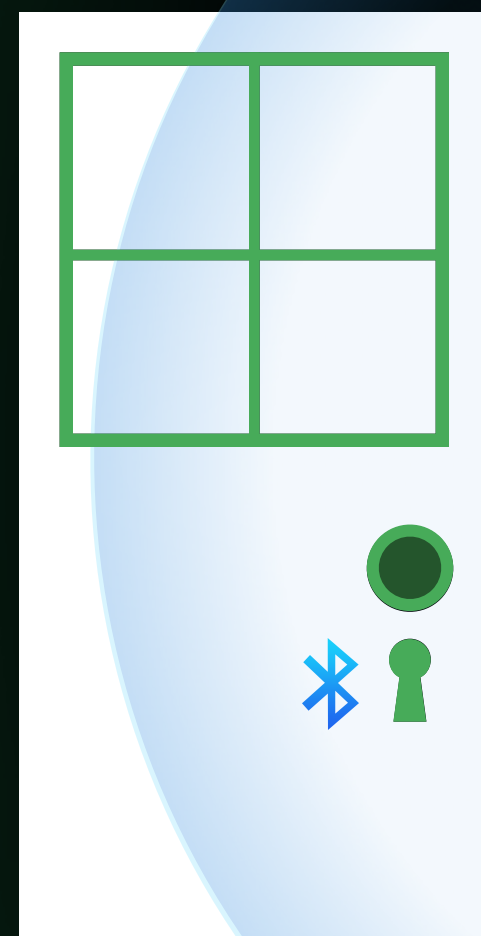
HAP secure  
tunneling





# Bluetooth Low Energy

HAP secure  
tunneling



# Bluetooth Low Energy

NEW

# Bluetooth Low Energy

NEW

Notifications

# Bluetooth Low Energy

NEW

Notifications

Metadata for custom characteristics

# Bluetooth Low Energy

NEW

Notifications

Metadata for custom characteristics

Support for multiple transports

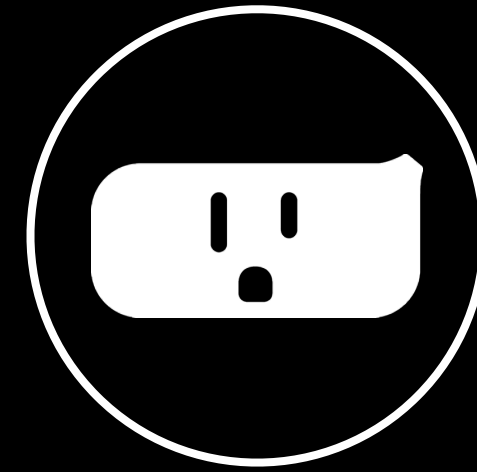
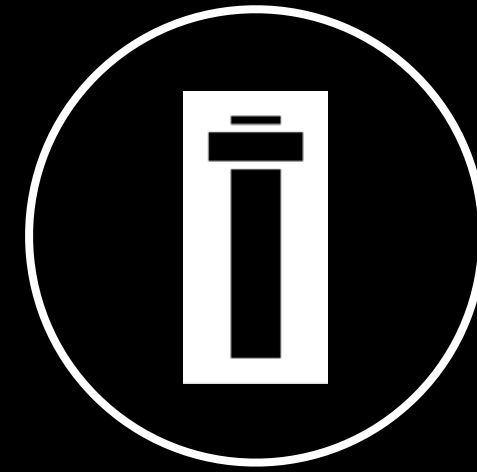
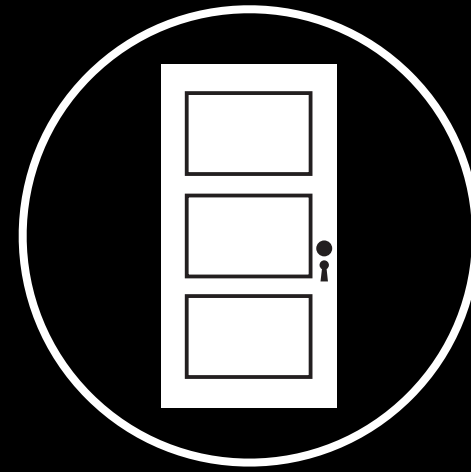
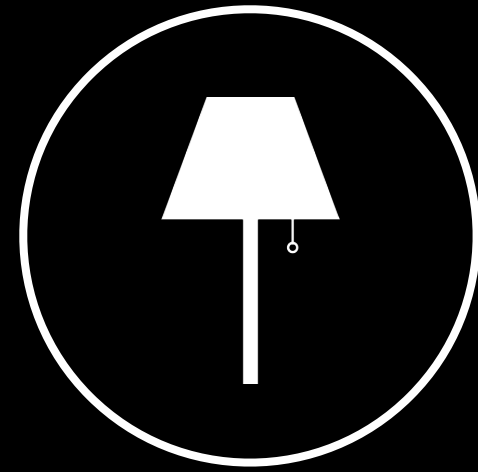
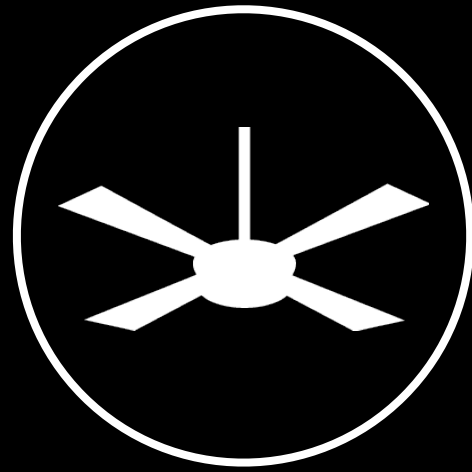


# Accessory Categories

NEW

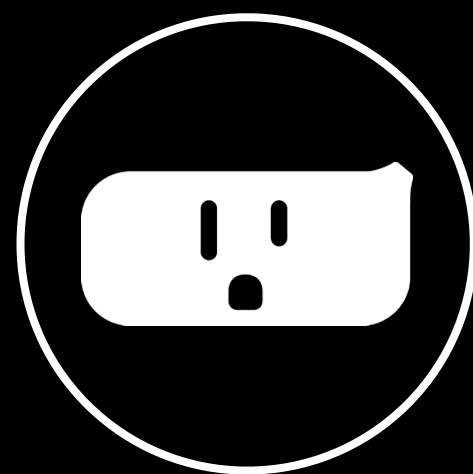
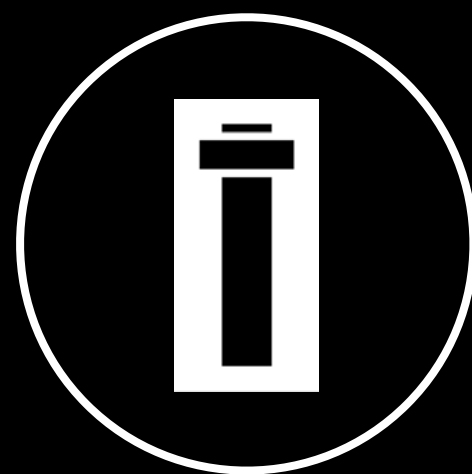
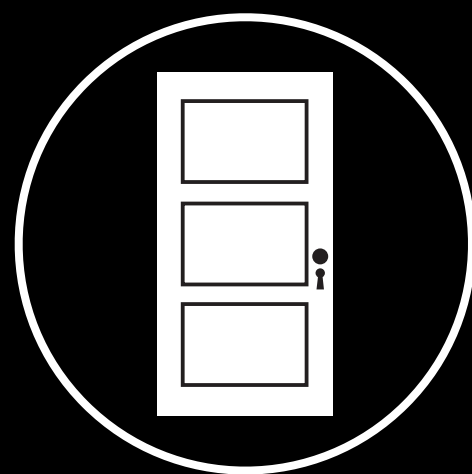
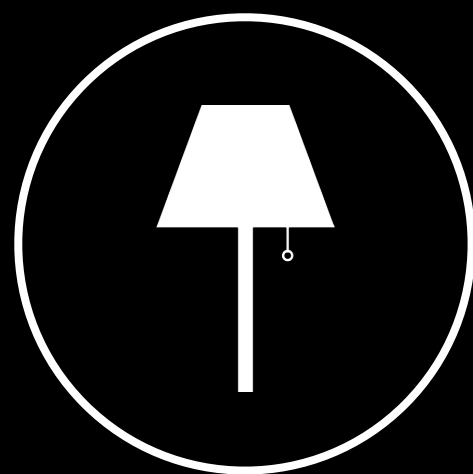
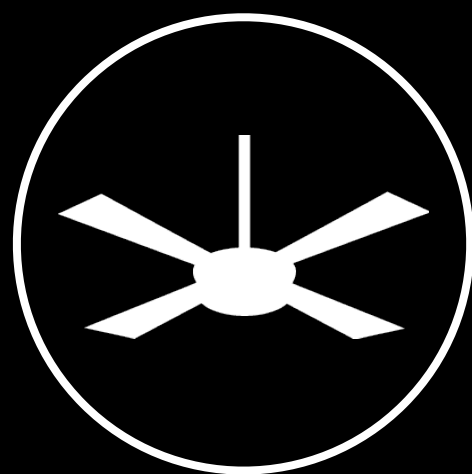
# Accessory Categories

NEW



# Accessory Categories

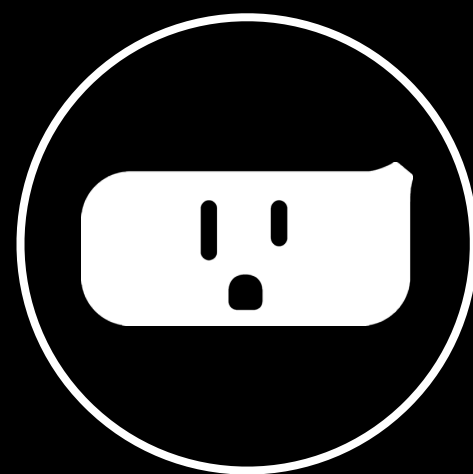
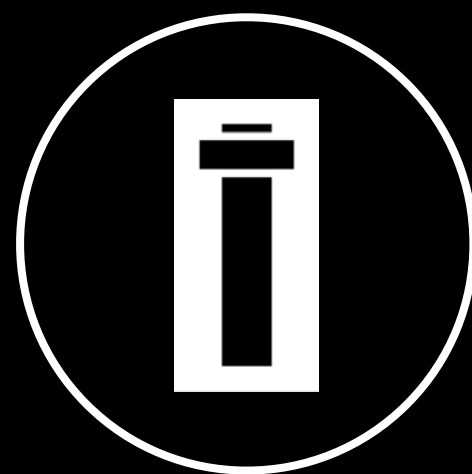
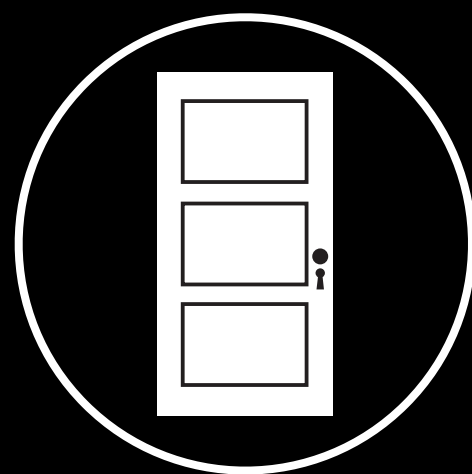
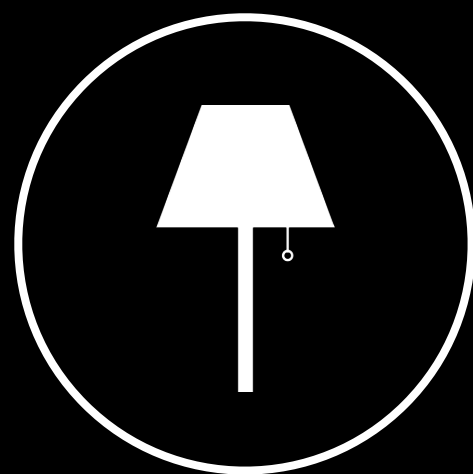
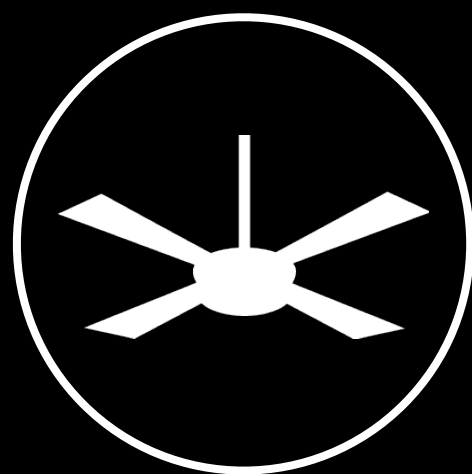
NEW



Awnings  
Blinds  
Shades

# Accessory Categories

NEW



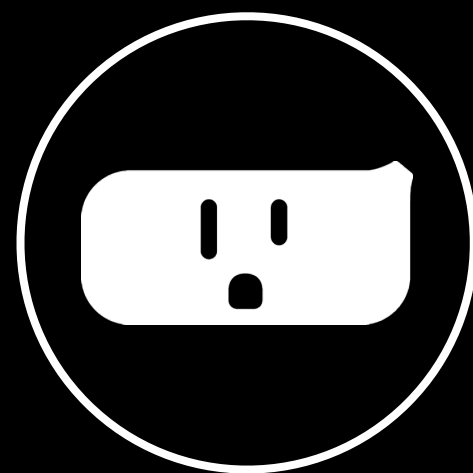
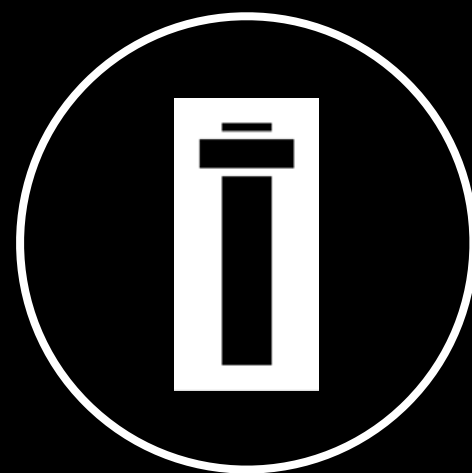
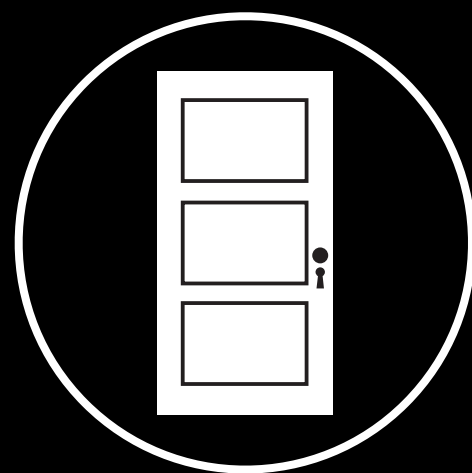
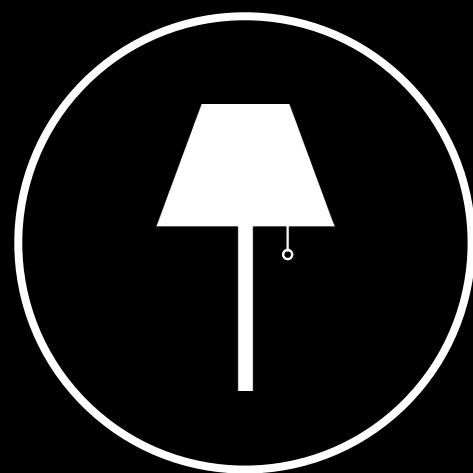
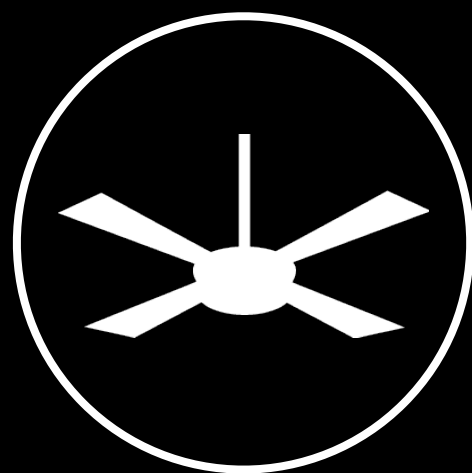
Window coverings

Doors and windows

Awnings  
Blinds  
Shades

# Accessory Categories

NEW



Window coverings

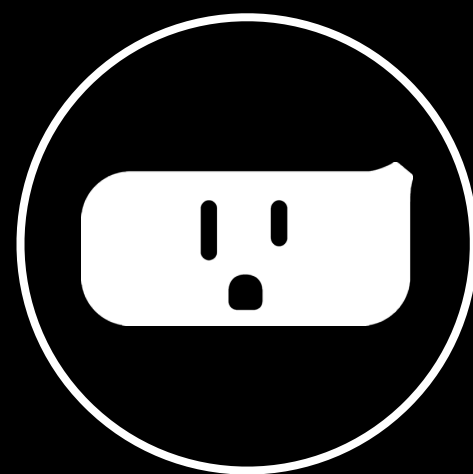
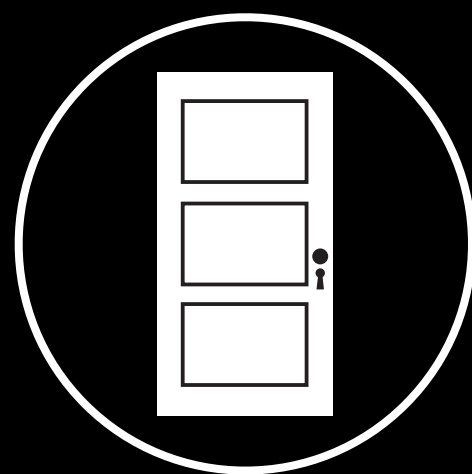
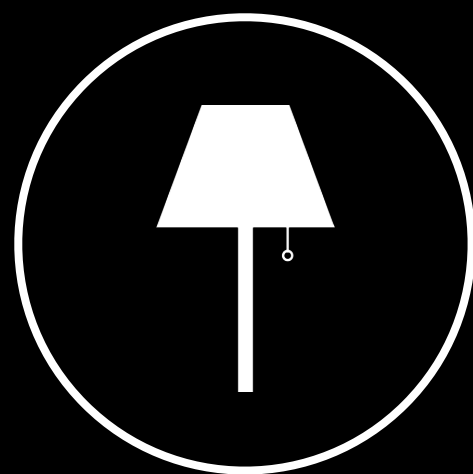
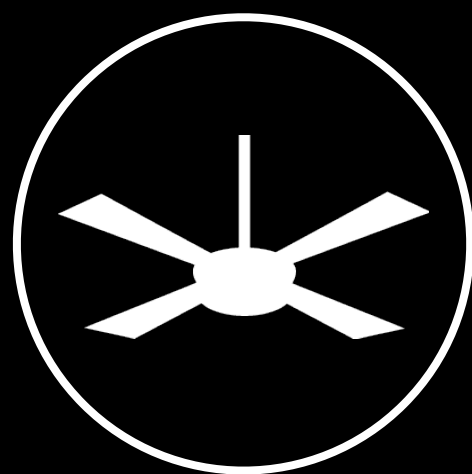
Doors and windows

Alarm systems

Awnings  
Blinds  
Shades

# Accessory Categories

NEW



Window coverings

Doors and windows

Alarm systems

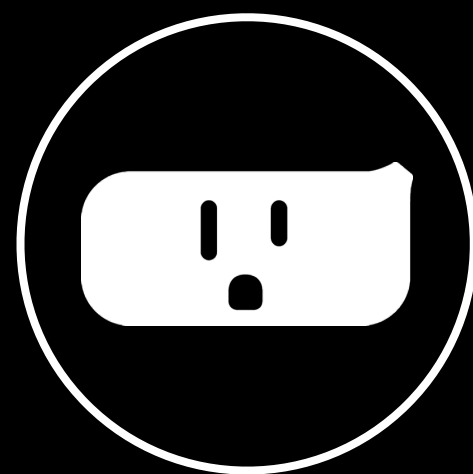
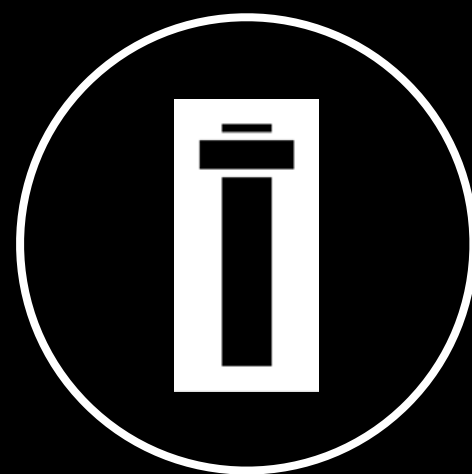
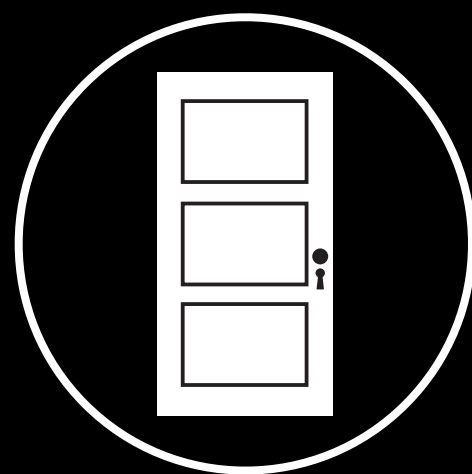
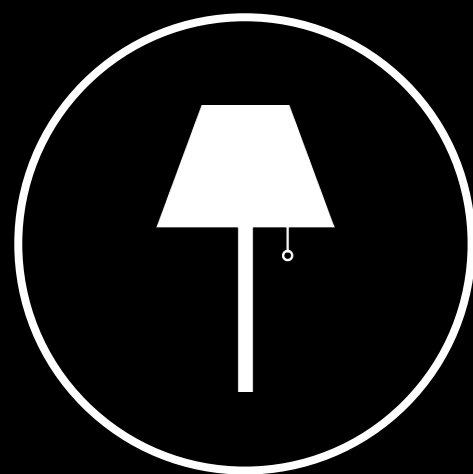
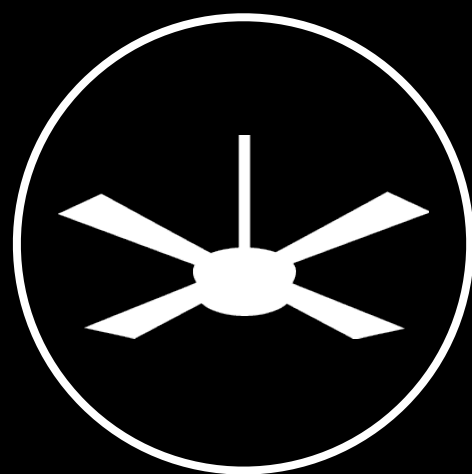
Sensors

Awnings  
Blinds  
Shades

Motion  
Air quality  
Smoke

# Accessory Categories

NEW



Window coverings

Doors and windows

Alarm systems

Sensors

Programmable switches

Awnings  
Blinds  
Shades

Motion  
Air quality  
Smoke

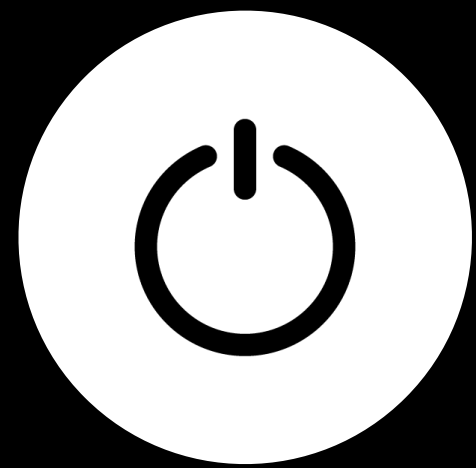
# Accessory Categories

Programmable switch



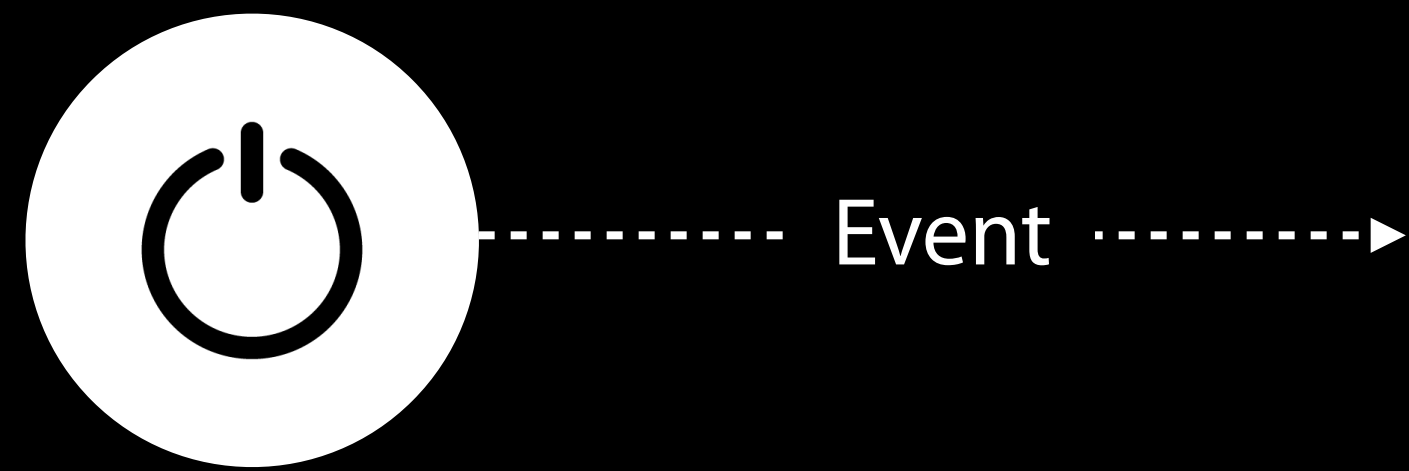
# Accessory Categories

Programmable switch



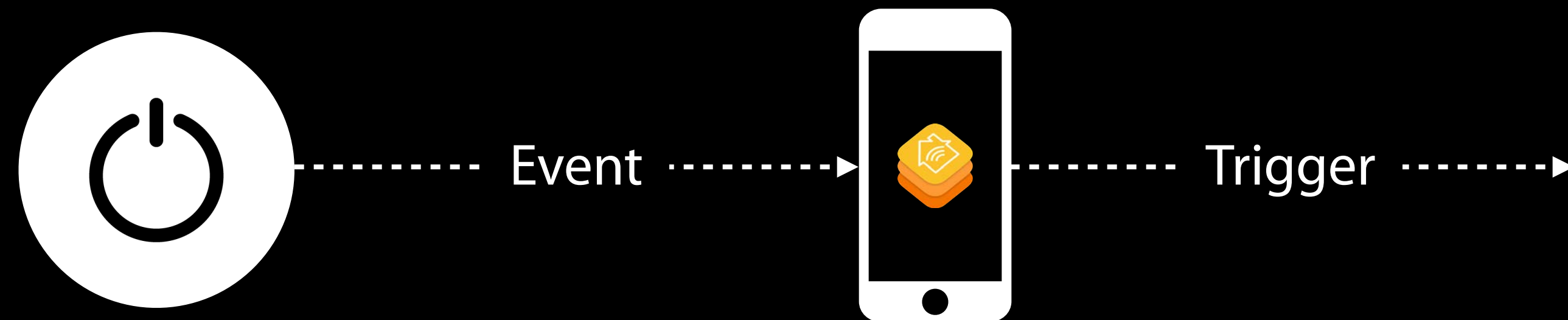
# Accessory Categories

Programmable switch



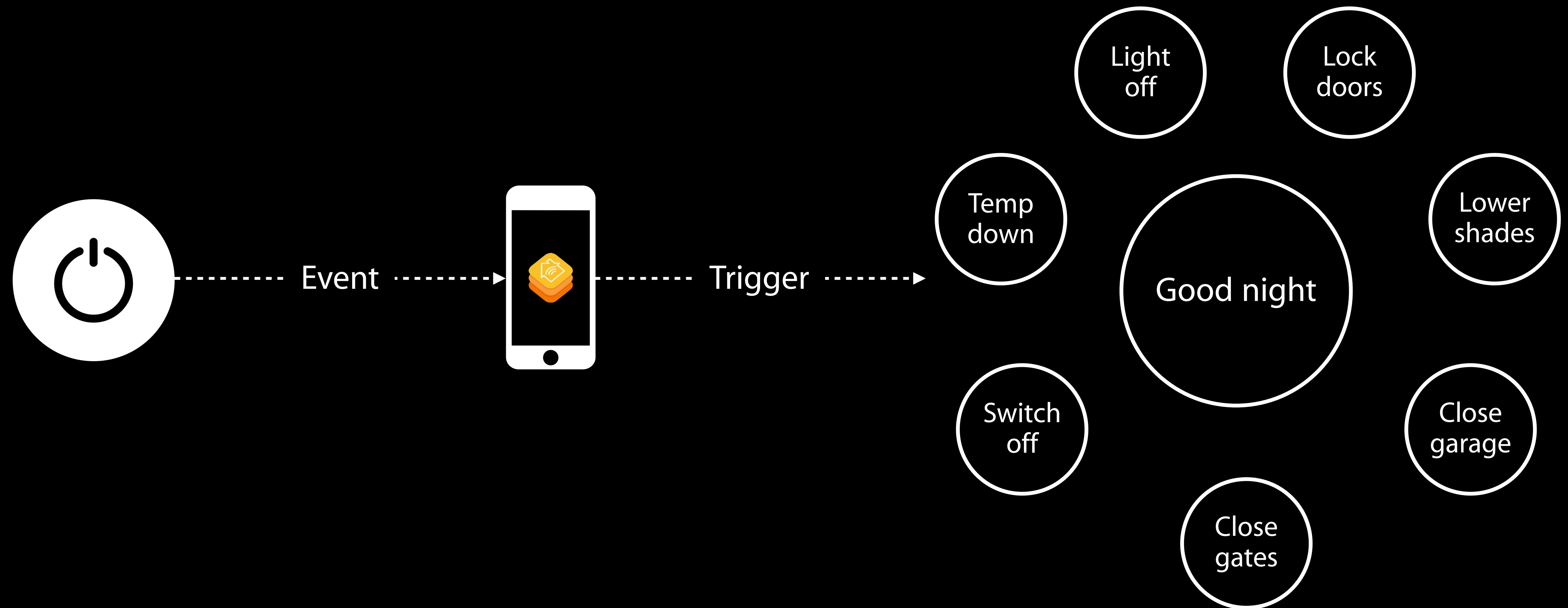
# Accessory Categories

Programmable switch



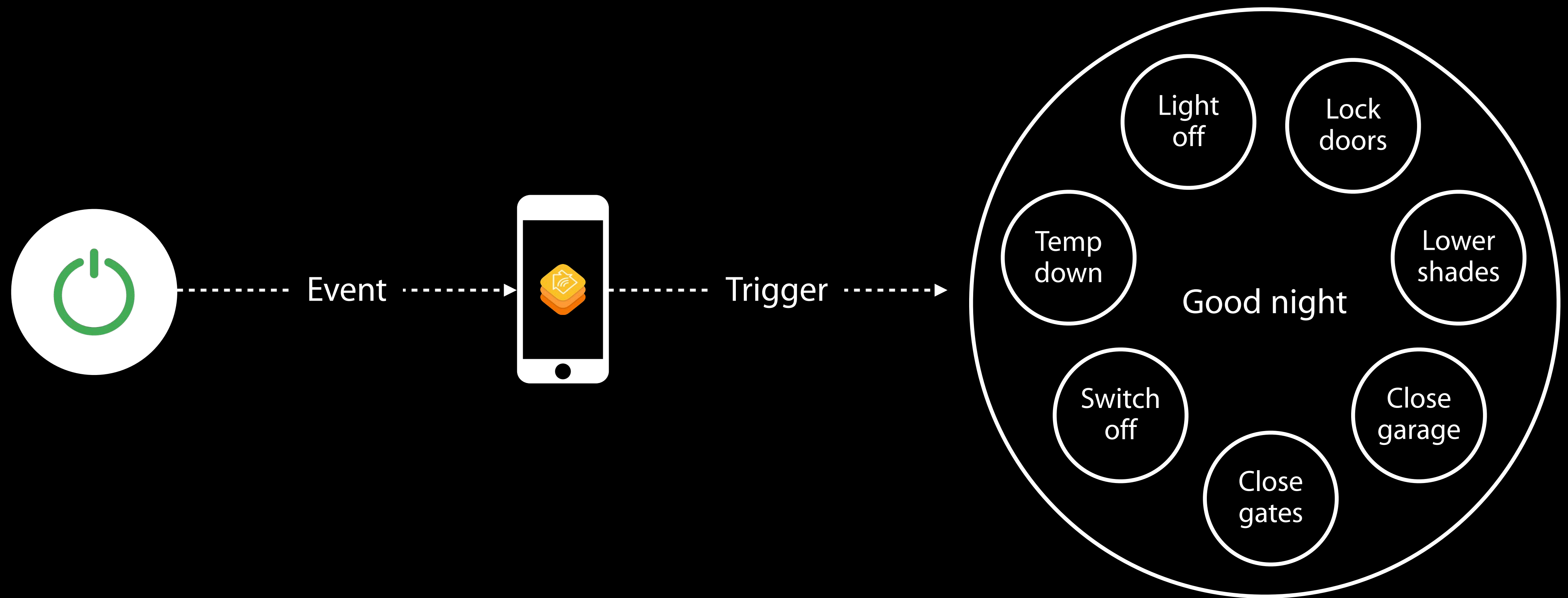
# Accessory Categories

Programmable switch



# Accessory Categories

Programmable switch



# Resources

# Resources

HomeKit Accessory Simulator (HAS)

# Resources

HomeKit Accessory Simulator (HAS)

HomeKit Accessory Tester (HAT)



# Resources

HomeKit Accessory Simulator (HAS)

HomeKit Accessory Tester (HAT)

Updated specifications and tools at MFi Portal

# Resources

HomeKit Accessory Simulator (HAS)

HomeKit Accessory Tester (HAT)

Updated specifications and tools at MFi Portal

MFi Program

# Resources

HomeKit Accessory Simulator (HAS)

HomeKit Accessory Tester (HAT)

Updated specifications and tools at MFi Portal

MFi Program

- [developer.apple.com/programs/mfi/](https://developer.apple.com/programs/mfi/)

# Summary

Enhancements

Predefined scenes

HomeKit on Apple Watch

Event triggers

Remote access

New features for Bluetooth accessories

New accessory categories

# More Information

## Documentation

HomeKit

[developer.apple.com/homekit](https://developer.apple.com/homekit)

## General Inquiries

[homekit@apple.com](mailto:homekit@apple.com)

## Technical Support

Apple Developer Forum

Developer Technical Support

[developer.apple.com/forums](https://developer.apple.com/forums)

# Labs

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HomeKit Lab

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App Frameworks Lab   Wednesday 2:30PM

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