

Apple announced HomeKit, the iOS developer framework for the smart home, back in June 2014, at its WW Developer Conference. Since then progress towards shipping products has been slow, at best, and at times positively glacial. However rumours are building for a significant upgrade to AppleTV, which may include a key piece of the HomeKit jigsaw.

For Apple to address the burgeoning smart home market seemed a logical and sensible move. To date the participants in residential smart homes have tended to focus on the high end, with complex, proprietary, expensive solutions requiring custom installation by dedicated engineers. This approach is by definition limited to a small slice at the top end of the overall market. For Apple to democratise this with a platform that opens the opportunity to the mass of device vendors, and addresses a premium mass market, would be entirely in character.



## What is Apple Planning for HomeKit?

Written by Nick Graves 01. 04. 2015

In announcing HomeKit in June 2014, Apple's stated goals were:

- To bring rationality to home automation, integrating all the disparate systems
- To bring consistency for users, a single control architecture
- To bring a broad opportunity to developers (this WAS announced at WWDC)
- And to bring security to home automation with secure pairing

Reading between the lines, HomeKit will also enable another extension to the Apple ecosystem, increasing further the (benign?) lock in for Apple users, as well as reinforcing the company's increasing mantra about security and privacy.

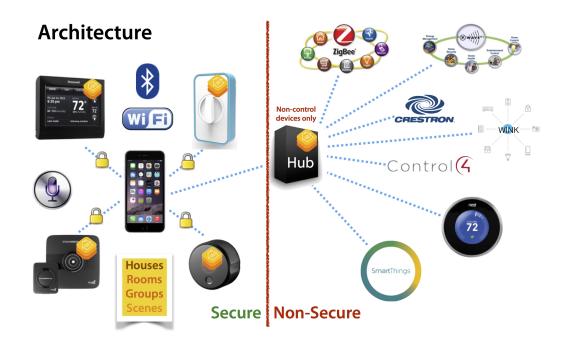
Yet progress has been slow. Some have speculated that the task has proved harder than Apple anticipated as it sought to identify the best commands, APIs and protocols to adopt and incorporate in its inimitable manner. Others suggest that this has been merely about prioritisation, with major projects, such as the Watch, HealthKit and CarKit taking precedence, preventing adequate focus from being applied to the home. Whatever the truth, numerous device vendors and other incumbents in the smart home space have reported slow progress, and a decidedly moving target, as Apple issues successive developer specifications and frameworks.

Now however there are signs starting to emerge that more substantial progress is imminent, with news centred on the AppleTV. Not only did the hockey-puck "hobby" device receive a substantial price drop this month, but rumours suggesting that this heralds a new version, possibly to be announced at the 2015 WWDC, are rife. This is potentially significant, as the AppleTV could play a key role as the resident "hub" for Apple's smart home platform.

The core proposition behind HomeKit is simple: it delivers a common database within iOS with standardised APIs that both device vendors and app developers can address. This means that any compliant device can in principle be controlled by any compliant app. This would enable a customer to purchase with confidence a HomeKit compliant device, with Apple's HomeKit chip in place, likely branded Mfi, in some manner, and know that it will integrate with their existing devices, and whichever app(s) they use to control everything.

Written by Nick Graves 01. 04. 2015

Control is from the iPhone (iPad, iPod Touch, or Apple Watch), which pairs securely with each device over Wifi or Bluetooth - feedback from vendors suggests that this pairing is indeed highly secure (the word "awesome" was used). Devices can then be grouped into Houses, Rooms, Groups and Scenes, to simplify the actions required for example to shut the house up for the night. Multiple iOS devices can be paired, enabling the different household members to take control as required. When the residents are away, control is still from the iPhone, but is likely to require an iOS device to remain in the house - which is where AppleTV comes into play. Clearly it would need to be able to install apps, to enable this control, which is where rumours of a new iteration of AppleTV makes sense, with a more powerful engine (A8?), and increased storage.



However Apple is unlikely to feel able to ignore the many other players already serving this market, albeit so far to a minority subset of the potential. These include smart home platform vendors such as <a href="Control4">Control4</a>, <a href="Crestron">Crestron</a> and <a href="Insteon">Insteon</a>, whose major focus is the commercial sector, but who have significant presence in high-end residential, and the connectivity consortia such as <a href="KNX">KNX</a>, <a href="Z-Wave">Z-Wave</a> and <a href="ZigBee">ZigBee</a>. In

the upcoming mass market, Google's acquisition of Tony Fadell's Nest business (and its " Works with Nest

- "published API set), Samsung's purchase of SmartThings
- , with its own goal of interoperability, and their joint (with others) announcement of the Thread

wireless protocol, are all pitching for a share of this space.

Apple's approach to any and all of these is to allow them to connect to a HomeKit installation through a HomeKit certified hub - Apple will guarantee the security on its side of the hub, and to ensure this, will allow only "non-control devices" to be managed from outside the iOS walled garden. However it seems that the definition of a non-control device is still very much up for grabs, and represents one of the multiple areas of uncertainty that developers are facing.



So does this represent yet another platform war being played out in the home? To an extent, yes, though the most likely outcome will be that device vendors hedge their bets, and ship products with multiple platform support. Just how many platforms remains to be seen, as Samsung and Google are not entirely aligned, despite their common participation in Thread, and it seems unlikely that the high-end incumbents will not respond. What does seem likely is that the many proprietary systems, such as Belkin's Wemo, BG Hive, Heatmiser neo, Pana sonic

and many others, will over time jump into one or more of these emerging platforms.

For resellers this is still an evolving opportunity, but one well worth exploring. One thing is for sure - there will be far more accessories available to sell than there ever will be for the Apple Watch. Products already announced include: Blue Maestro Tempo, Chamberlain MyQ Smart Garage , Elgato Eve , Gr

id Connect ConnectSense

Honeywell Lyric

iDevices Smart Plug

iHome smart plugs

4/5

## What is Apple Planning for HomeKit?

Written by Nick Graves 01. 04. 2015

Withings Home

Incipio smart plugs

Insteon Hub

Litehouse circuit board

Mobilinc Home App

Philips Hue family

Schlage Smart Lock
and

, and more are bound to emerge.

In the meantime Apple will continue to emphasise its privacy and security message. To date this has perhaps not resonated as strongly with the public as Tim Cook would like - people still appear quite happy to publish their private lives on Facebook's servers, and use the plethora of Google's services. However the physical concerns about home security may yet prove more tangible in people's minds than a virtual posting ever would.

**Go Apple Privacy (includes HomeKit)** 

Go Apple HomeKit Announcement

**Go Apple HomeKit Developer Page**