LOGITECH POWERS SMART HOME HUB, REMOTE CONTROL AND APP USING PUBNUB

Logitech is a global provider of personal computers and tablet accessories, including keyboards, mice, microphones, remote controls, and webcams.

Logitech Harmony Ultimate Home is a home automation hub, touchscreen remote, and smartphone application that enables users to control and monitor home entertainment and automation devices (eg. locks, lights, thermostats) remotely either through the app or remote control.
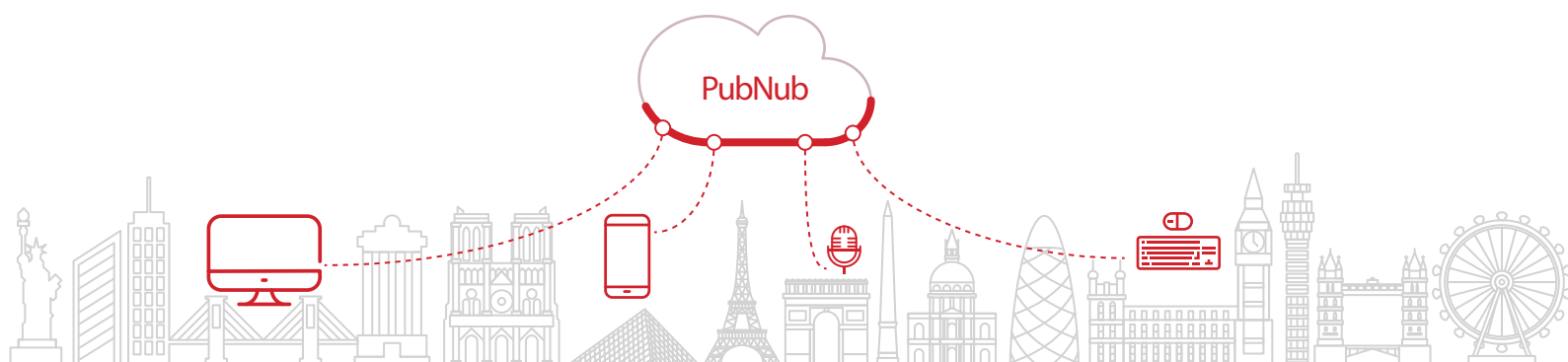
Smartphone Remote Control and Monitoring

With any home automation solution, users want to monitor and control connected devices from anywhere with an Internet connection, all from their smartphone. Logitech Harmony hub-based remotes include a smartphone app for iOS and Android for this functionality. To power this capability, the Logitech development team needed a way to securely and reliably stream data between the smartphone application and the Harmony Hub.

Logitech uses PubNub Realtime Pub/Sub Messaging to power the real-time communication between the smartphone application and hub to enable Harmony users to control their devices outside the home.

> **"** *PubNub is used to enable the Harmony away-from-home capabilities. Harmony app users can now control their entertainment and smart home devices whether from inside or outside their home. This feature gives users great peace of mind. They can turn off the lights and the thermostat, or double check that they've locked the front door."*

William Chien
Director of Product Management at Logitech

Flexible and customizable, the Harmony API also allows 3rd party apps (like IFTTT) to integrate and extend Harmony functionality. The Harmony API uses PubNub to communicate third party app requests to the Harmony Hub in the user's home.

Beyond device control, PubNub also streams device state from the Hub to the smartphone application. This enables users to monitor the status of devices in their home in realtime, such as temperature, or whether the lights are turned off and on. Overall, PubNub's realtime data streaming keeps users in the loop in realtime, and streams any changes as they arise.

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PubNub was a key ingredient in enabling both away-from-home control, as well as the Harmony API. When third-party applications use the Harmony API to trigger an Activity, a Harmony hub will receive that message and start working immediately."

Build vs Buy

In developing Harmony API and away-from-home capability, the development team had to decide whether to build real-time infrastructure themselves, or power app-hub communication with a data stream network. Understanding the significant resources that would go into building and maintaining a real-time backend in-house, Logitech chose the PubNub Data Stream Network.

This ensures reliable and secure communication between the application and Hub, and reduces resources otherwise devoted to operating, maintaining, and orchestrating real-time messaging.

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Using PubNub was more cost effective than trying to build this capability ourselves. We don't have to implement, and more importantly, operate a real-time infrastructure meeting high scalability, performance and reliability requirements."

William Chien

Director of Product Management at Logitech