

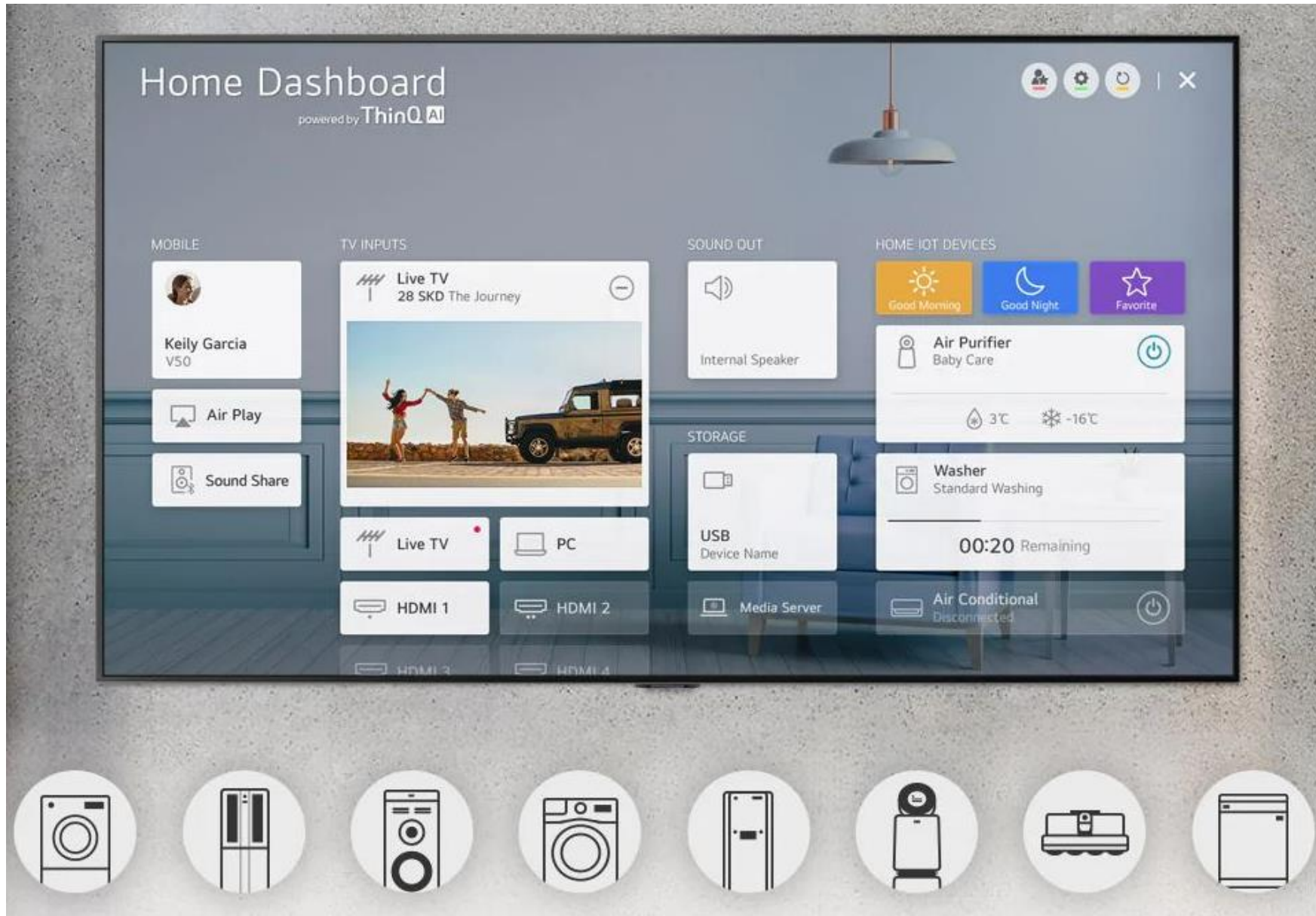
Second screen use cases in webOS

LG webOS Platform

- Products: TV, Signage, IIVI(Auto), Robot, Watch, Fridge, etc.
- Open Source Edition: <https://www.weboose.org/> (Raspberry Pi 4)



Home Dashboard in LG TV



Cloud*
(LG ThinQ service)

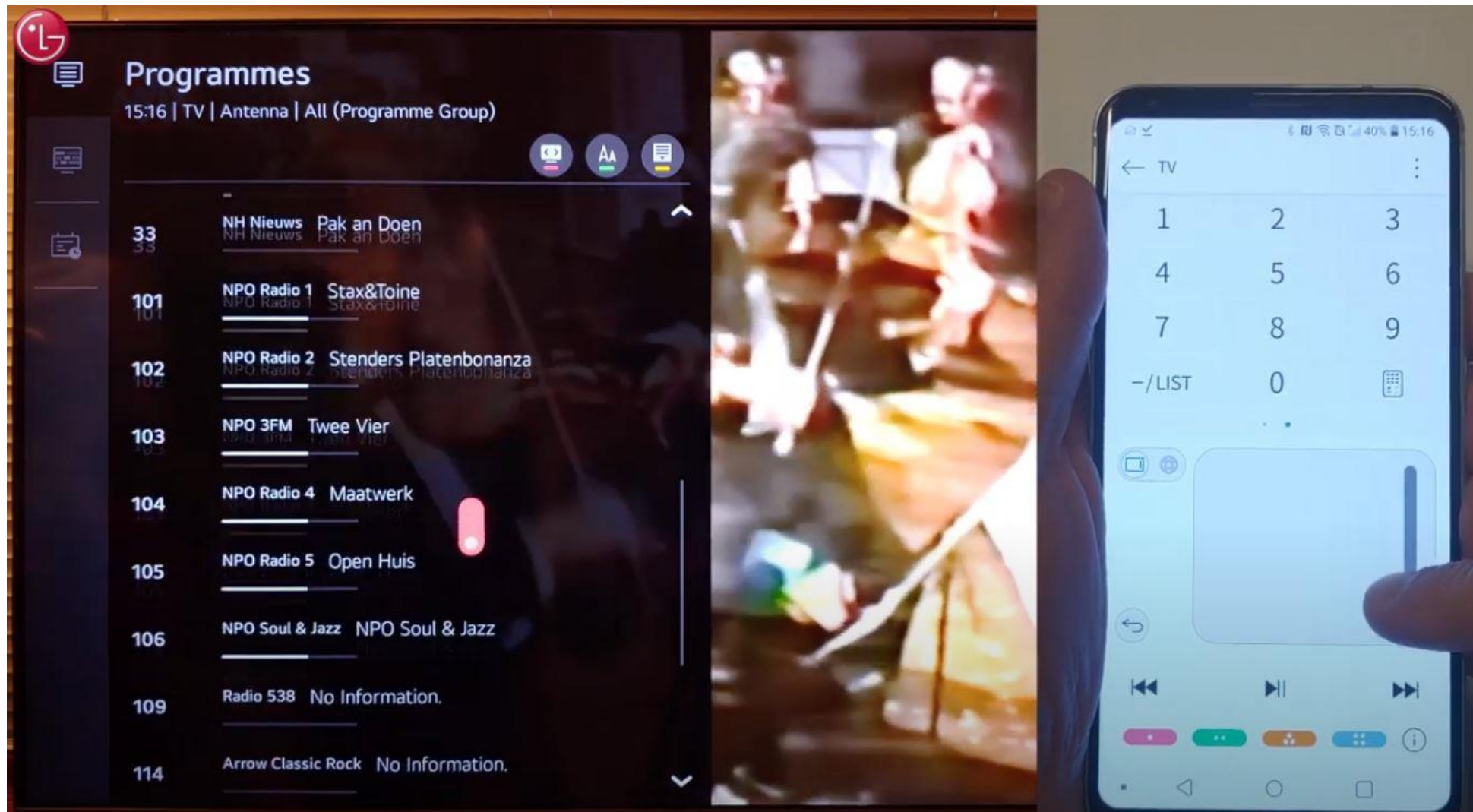
Local network*
(SSDP, WebSocket)

Bluetooth
(AV, power on)

AirPlay
(Connect to iOS)

Miracast
(Screen share)

LG ThinQ for controlling devices (Android, iOS)



[LG TV] - How to Control the TV via the ThinQ app: <https://youtu.be/mqzYqulygmU?t=125>

webOS second screen service



Second Screen Gateway

A node.js WebSocket server that parses SSAP requests

1. SSDP and WebSocket

LG develops both sides. (few issue)

2. SSAP (Simple Service Access Protocol)

SSAP is a protocol built on top of WebSocket. It consists of JSON messages sent between TV(server) and mobile(client).

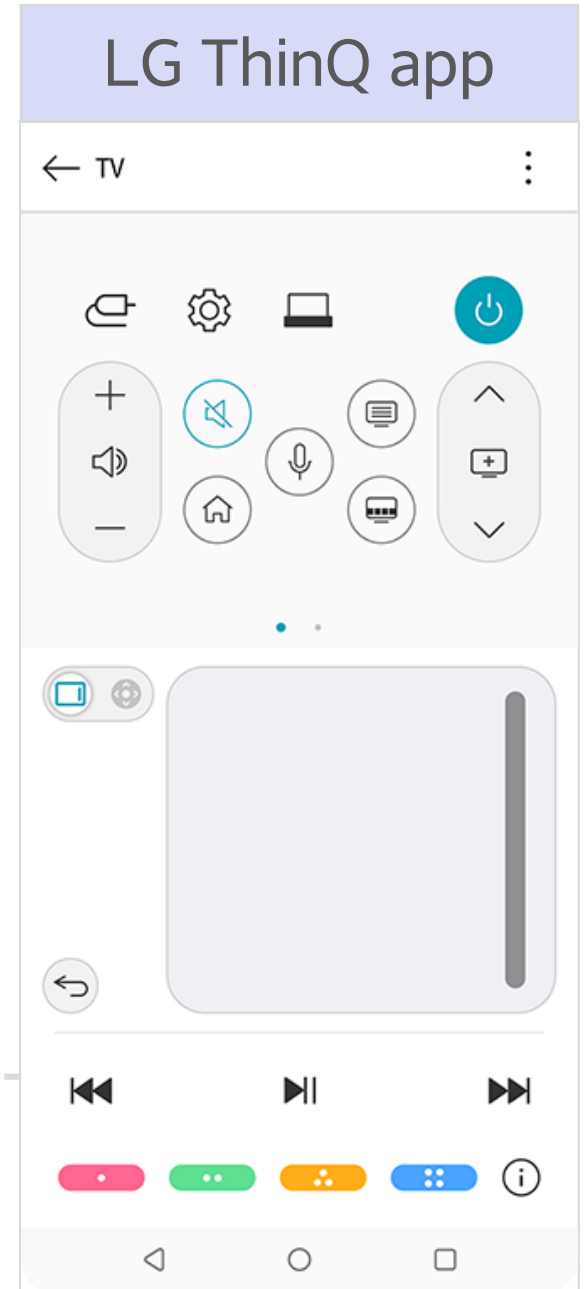
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* SSAP Examples

`ssap://system.launcher/open`

`ssap://media.controls/play`

`ssap://tv/getChannelList`



Second screen use cases in webOS

- Remote control for TV apps using a mobile app
 - : If a TV app can send the control UI to a mobile browser?
- Promote TV app from Mobile (web) apps
 - : It could make TV app ecosystem to be expended.
- Web app beaming
- Media beaming

* ConnectSDK: https://connectsdk.readthedocs.io/_/downloads/en/latest/pdf/