

YOUVIEW: SIMPLY SMART TV

Building an HbbTV OpApp

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YOUVIEW TV LIMITED – WHAT WE DO

YouView develops and operates **client software and cloud services** which power the TV discovery and viewing experience for **our customers**

The experience aggregates **free and pay content** delivered over linear broadcast, linear IP and on demand across **multiple content providers**



youview®



TalkTalk
For Everyone

SONY

Freely
everyone ^{TV}

YOUVIEW TV LIMITED – WHO WE ARE

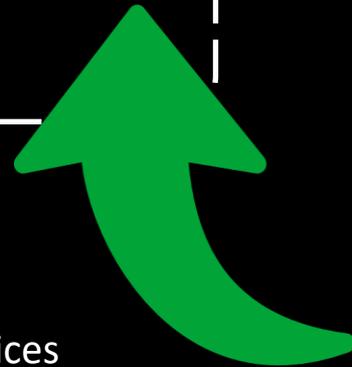
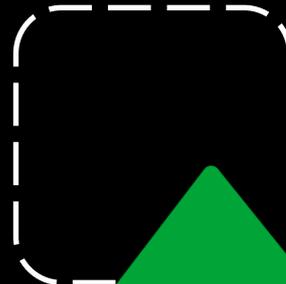
- UK based – London office
- Founded in 2010 – Launched in 2012
- 200+ staff
- Full stack engineering capability
- 24/7/365 operations

Our shareholders are household names:
leading UK based ISPs
and Public Service Broadcasters

youview®



BUILDING ON 10+ YEARS OF DEVELOPMENT AND SUPPORT OF OPERATOR USER EXPERIENCES



- Operator UX integration with Host Device UI
- Scalable, field proven Backend Platform
- Development for resource constrained consumer devices

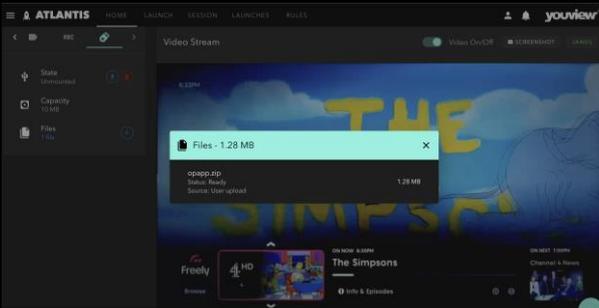


everyone 

RIG BASED DEVELOPMENT & TEST: SUPPORTING HYBRID WORKING AND AUTOMATED TESTING



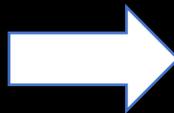
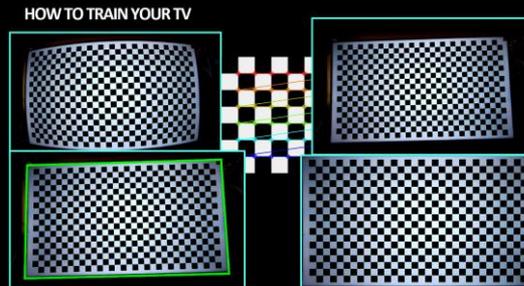
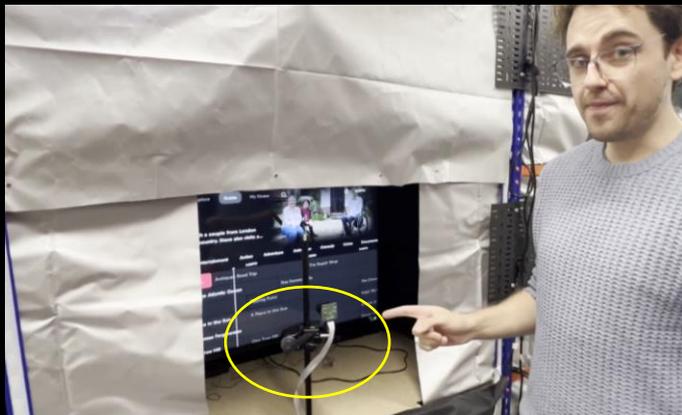
- Complements desktop based development
- Rig slots bookable, configurable and accessible via “Atlantis” web interface
- Avoids every developer needing a sample of every device model
- Rigs can be used by developers in the day and for testing at scale overnight
- Controlled by IR
- Output typically captured via suitable interface, e.g. HDMI, LVDS



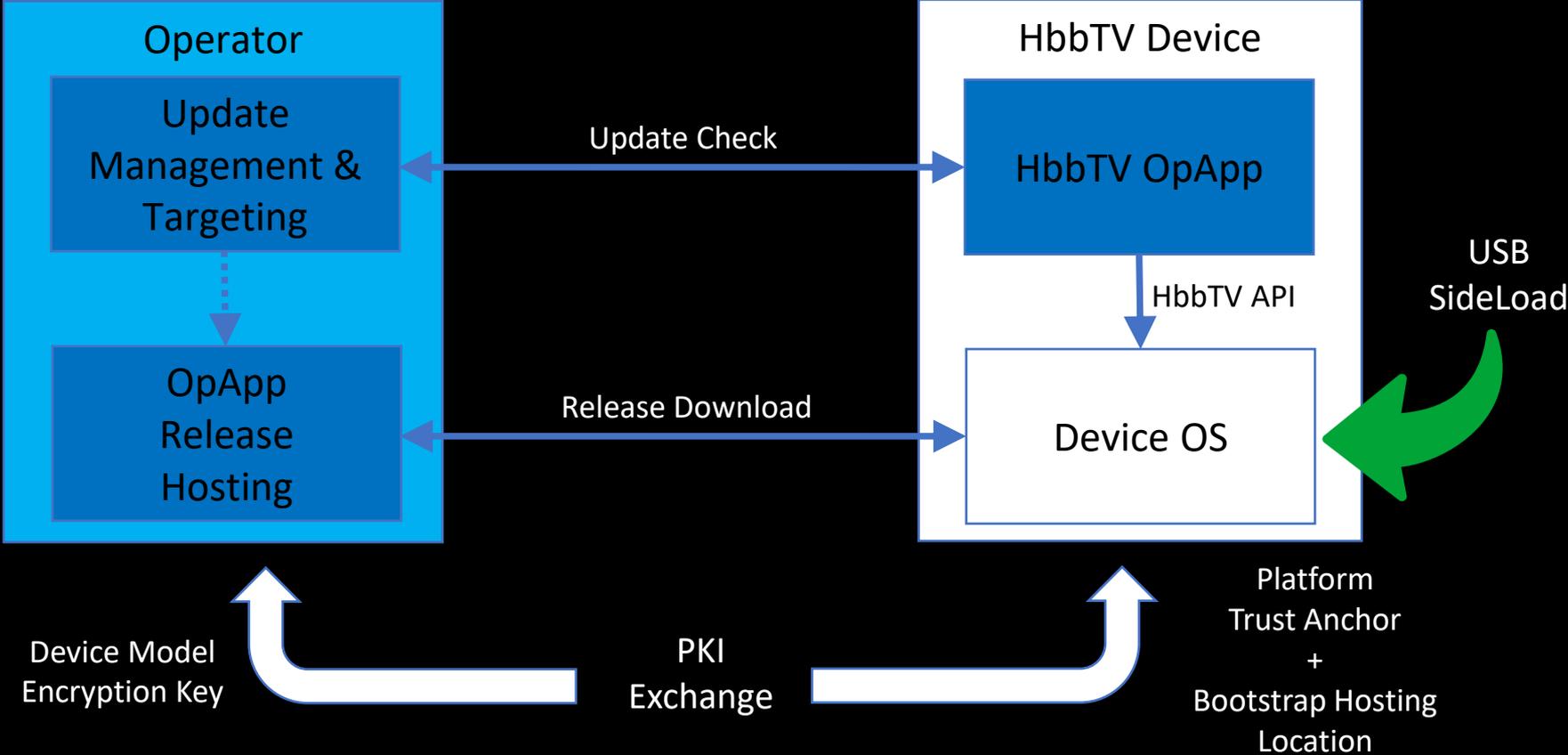
But wait!

My HbbTV TV has no HDMI output!?

SUPPORTING HBBTV TVS IN RIGS



DEPLOYING AN OPAPP TO HBBTV DEVICE



THREE HBBTV WINDOWS



- OpApp window
 - Operator UI
 - Not visible when in “background”
- CP app window
 - Broadcast-related apps, e.g. CRB
- Video window
 - Presents IP Channel video
 - Renders subtitles
 - Always visible
 - Never has focus

PUTTING IT ALL TOGETHER

The screenshot displays the ATLANTIS control interface. At the top, there is a navigation bar with the following items: **ATLANTIS**, HOME, LAUNCH, SESSION, LAUNCHES, and RULES. On the right side of the top bar, there are icons for a user profile and the **youview** logo. Below the navigation bar, there is a toggle for "Enable Keyboard Shortcuts" and a dropdown menu currently set to "CEM".

A large, semi-transparent remote control overlay is positioned on the left side of the screen. The remote features various buttons including power, volume, channel, and a numeric keypad. At the bottom of the remote are buttons for "HOME", "APP", "EXIT", and "HELP".

The main area of the interface is a video player. In the center of the video frame, the number "3" is displayed, enclosed within a red rectangular box. Below the video player, there is a blue status bar with the text "Stream error: Buffering". Underneath this bar, there are two tabs: "SERIAL LOG" and "MODULATOR LOG".

At the bottom of the interface, there is a footer containing the text "2024 - Automator Infrastructure" on the left and "GIVE FEEDBACK" on the right.

**THANK
YOU!**