

Universal Control API

Reaching out beyond the Set Top Box

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BBC R&D

Universal Control

Don't build every accessibility feature into the television or set-top-box ... UI will always be a compromise.

Instead the box serves an API for controlling its functions. Leave the UI up to the client.

Expose identifiers, metadata, state.

Past year: devising an API and building prototypes

Enables much more than accessibility: multi-screen / multi-device apps and integration with web content.

Universal Control

RESTful web API. XML. Discovery mechanisms.

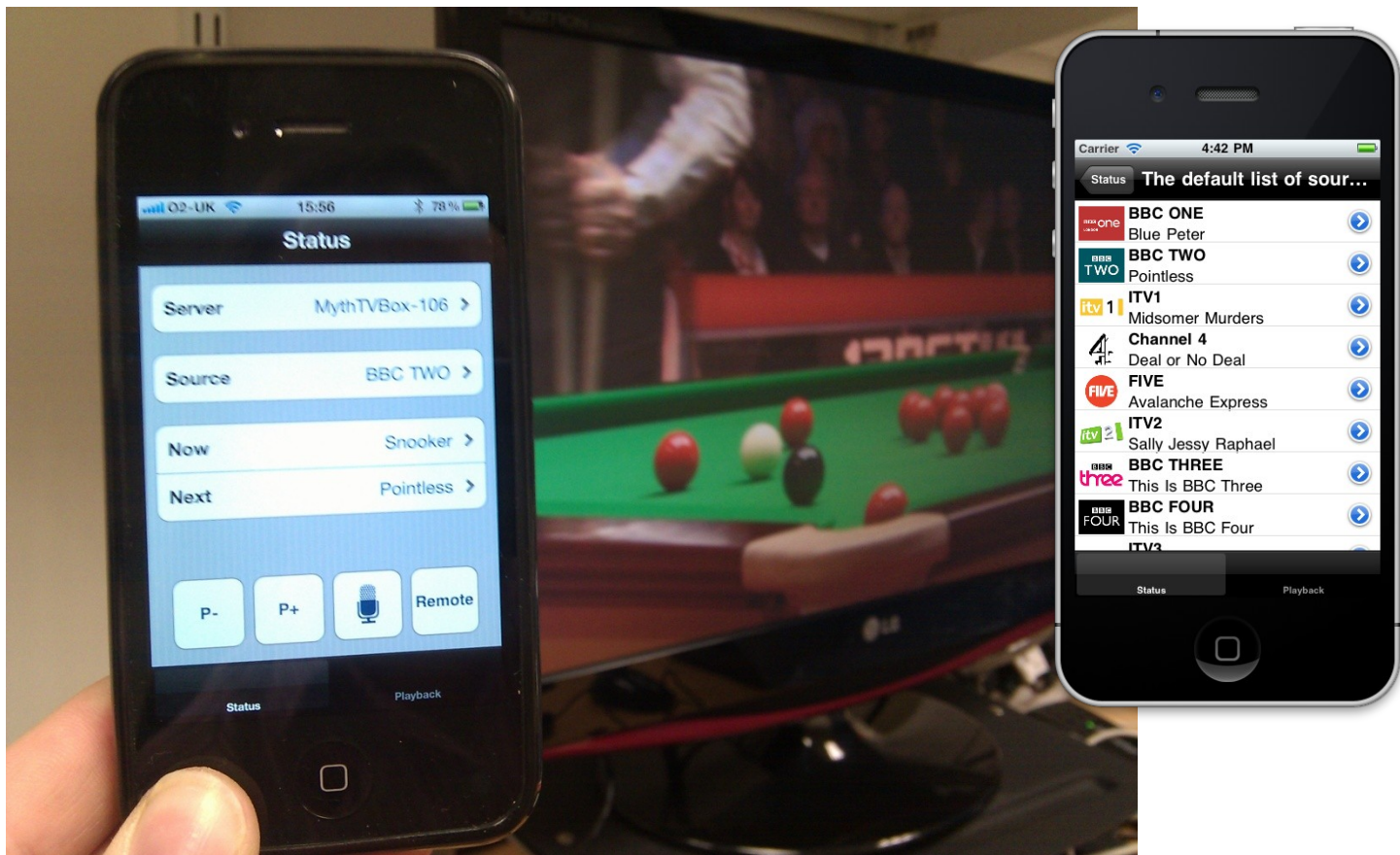
Data model:

- **Content** (video, audio, interactive apps)
- **Sources** (channels, streaming services, home servers ...)
- **Outputs** (displays)
- **Acquisitions** (booked recordings, scheduled downloads ...)
- **Application Extension Mechanism**

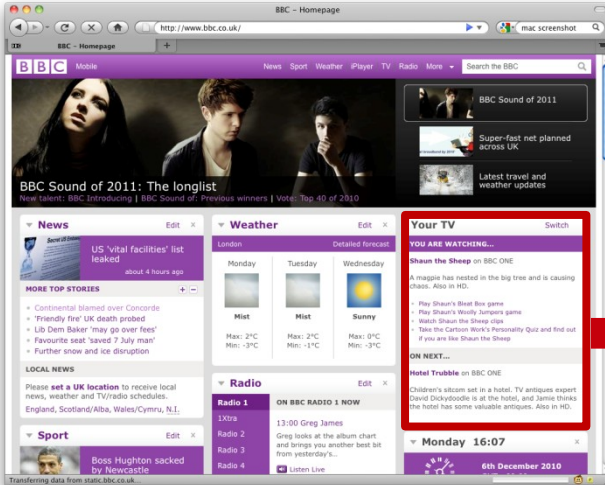
“Universal” for TVs, internet radios, media centres, ...

Not about streaming the media or exporting the TV UI.

MythTV Server ... iPhone client



Integrating with the web



Your TV Switch

YOU ARE WATCHING...

Shaun the Sheep on BBC ONE

A magpie has nested in the big tree and is causing chaos. Also in HD.

- Play Shaun's Bleat Box game
- Play Shaun's Woolly Jumpers game
- Watch Shaun the Sheep clips
- Take the Cartoon Work's Personality Quiz and find out if you are like Shaun the Sheep

ON NEXT...

Hotel Trubble on BBC ONE

Children's sitcom set in a hotel. TV antiques expert David Dickydoodle is at the hotel, and Jamie thinks the hotel has some valuable antiques. Also in HD.

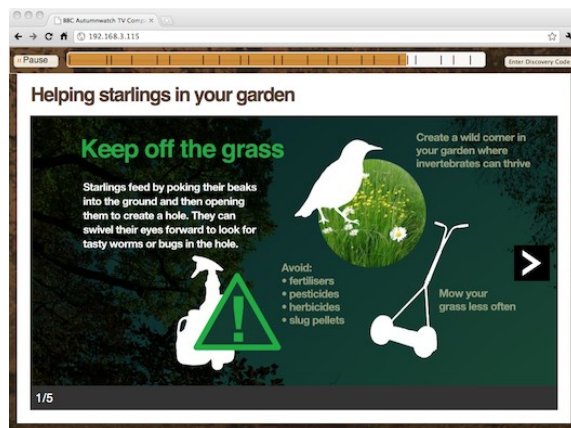
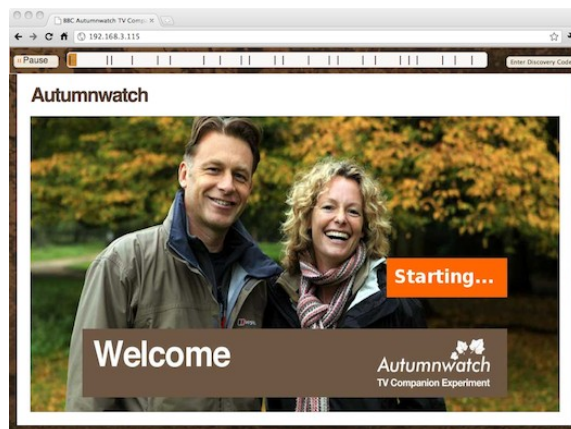
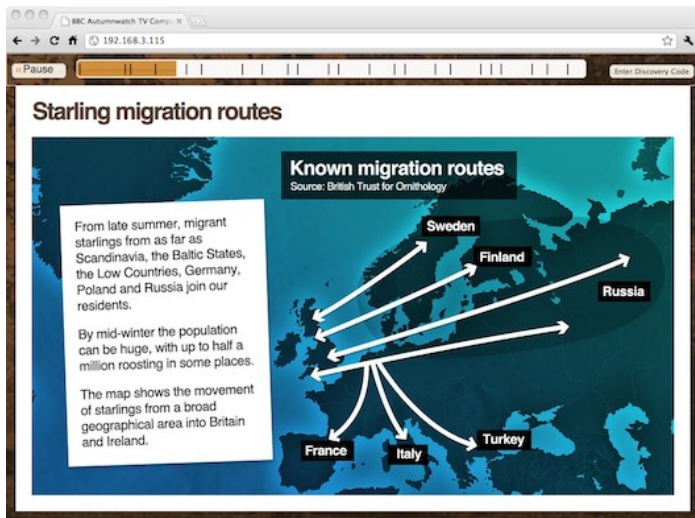
Homepage knows what you are watching.

TV Listings page could offer to book recordings?

Synchronised dual-screen content

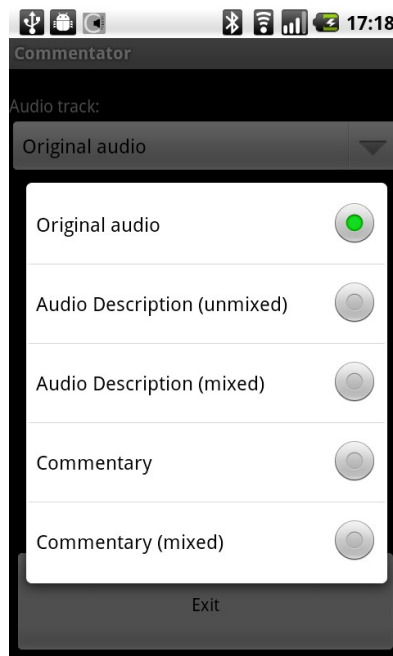
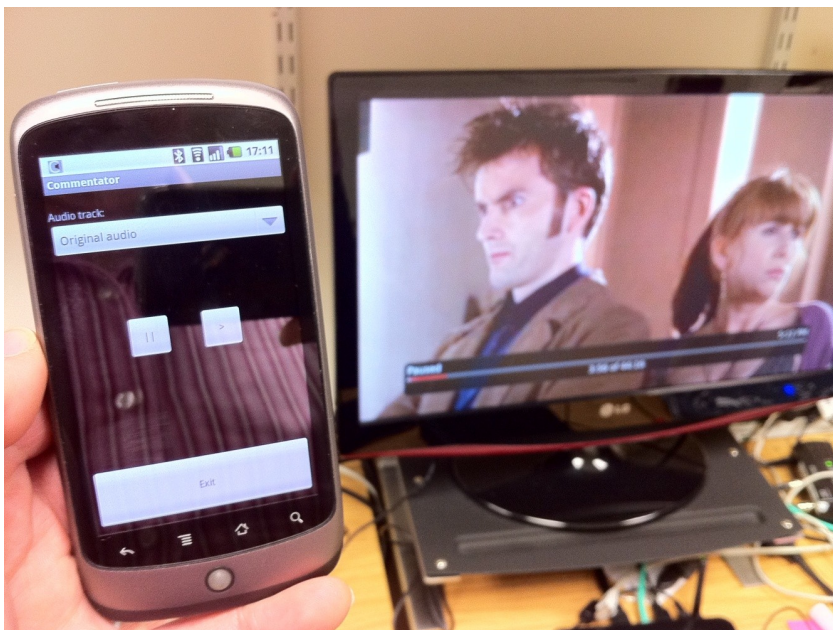
The user can jump to different points in the programme by touching the timeline.

Which device is the 2nd screen?



“Director’s Commentary” app

Someone with poor eyesight can listen to time-synchronised audio-description while still viewing as a shared experience with the rest of the family.



Where do we take this?

Is this group interested in standardising this kind of API?

Our draft specs will be publicly available from Friday as R&D white-papers at: **<http://www.bbc.co.uk/rd>**

Will also be submitted as member submission to W3C

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