



OBS Background



Ocean Blue Software is the pioneer of open/shared source broadcast software

- Founding member of DTVKit (with Broadcom)
- •Actively involved in Android / AndroidTV for 5+ years
- Working with RDK for 4 years on broadcast integration
- Providing HbbTV solutions since 2015 and developer of parts of the HbbTV Test Suite
- Creator of ORB (The Open Red Button Project).
- HbbTV Test Centre
- European Based (offices in Bristol UK & Athens Greece)
 and growing rapidly.



The Open Red Button Project



What Is ORB?

- Collaboratively developed by OBS and several large HbbTV members
- An HbbTV 2.0.3 browser solution leveraging the latest innovations in browser technology
- Majority implemented in JavaScript
- Facilitates the use of the default browser in the platform (Android WebView/RDK WPE)
- Royalty free with a route to full open source

The Benefits

- Faster
- Cheaper
- More Flexible
- More Secure





ORB integrated with Foxxum OS4 running on RDK







Cross Platform Reusable Core

- Injected JavaScript polyfill extending the browser frame for HbbTV
- Default JavaScript behaviour overridden where needed
- HbbTV video object polyfilled to use the browsers native HTML5 Video object for a fast start – can easily be replaced
- Other features fully in JavaScript include TTML subtitle decoder
- Small number of reusable C++ components (Application manager, parts of media synchroniser)



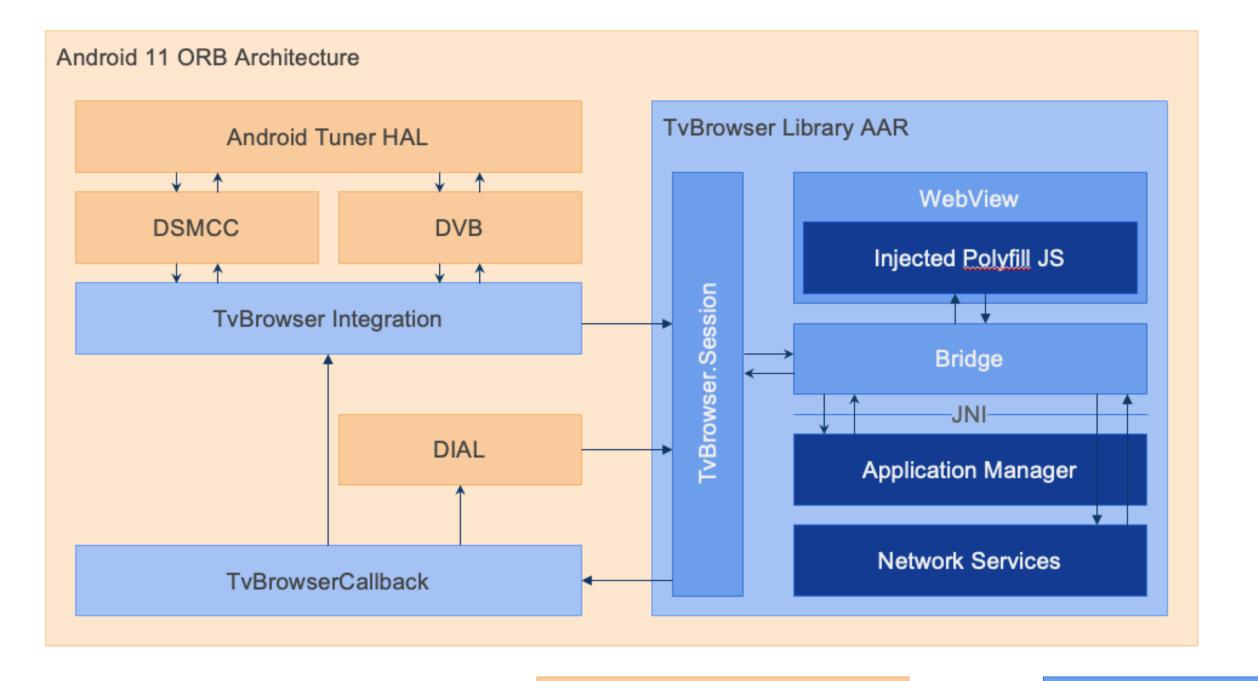




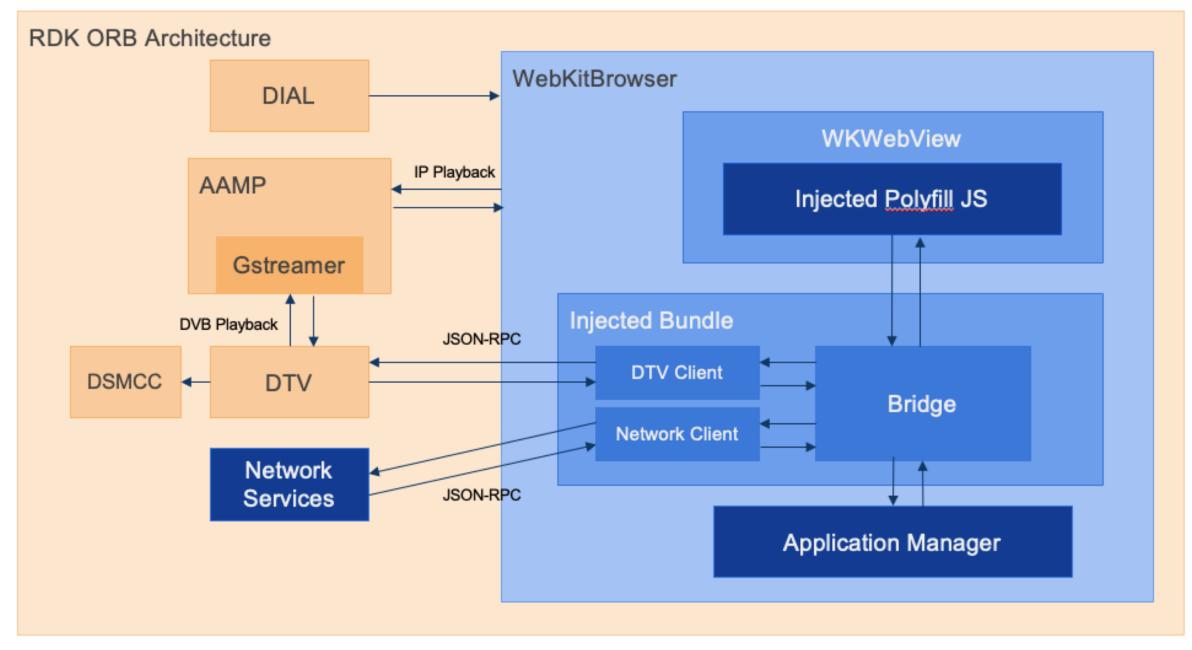
Reference Integrations

- Narrow integration interfaces for porting to platforms, browsers, DVB, DSM-CC, media players
- Android 12 and RDK reference integrations available
- Reference integrations use DTVKit components with binaries supplied

Android 11



RDK 4



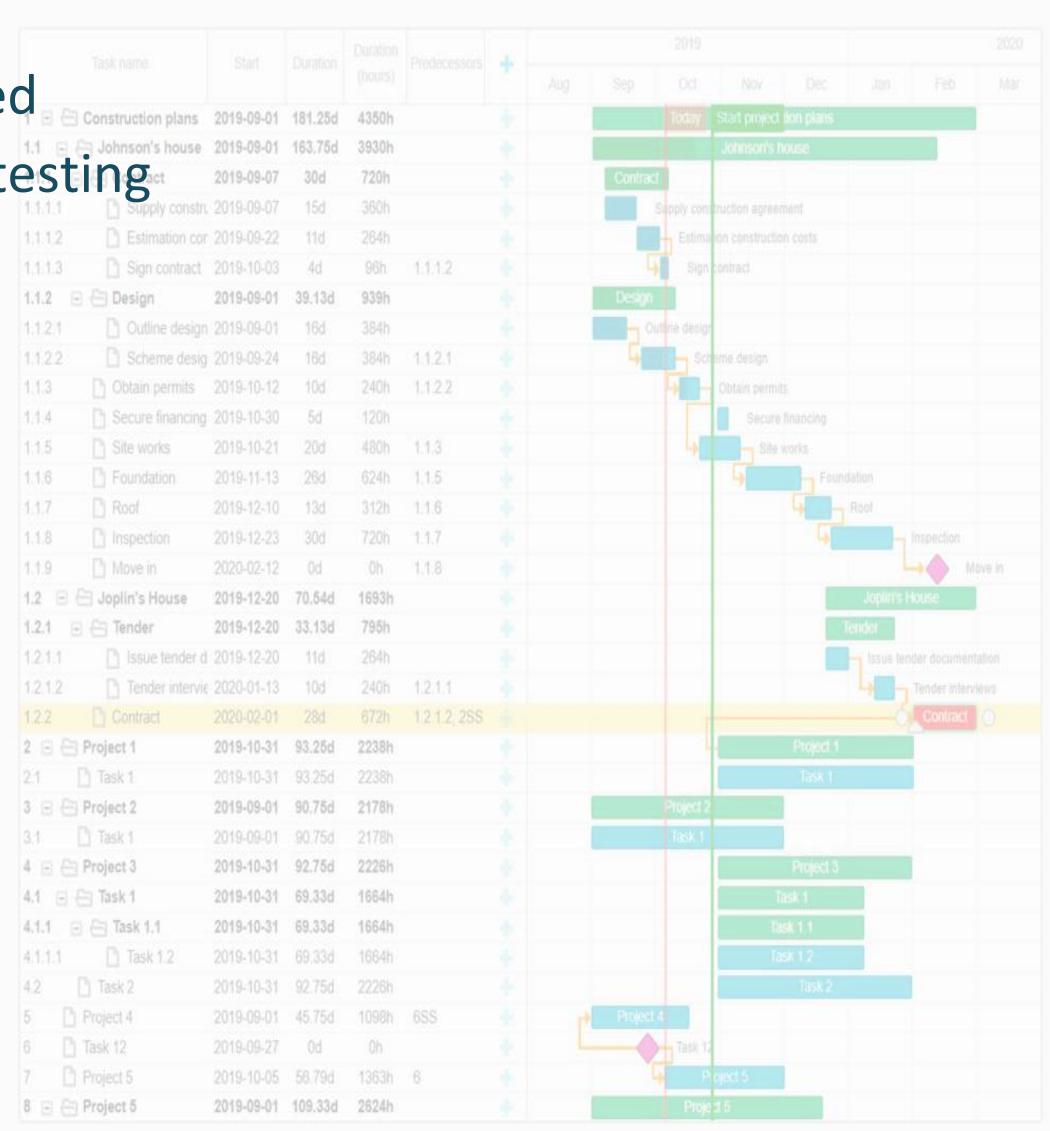


Current Project Status



Status

- Android reference integration complete and fully tested
- RDK reference integration architecture revised and in testing
- Compliance level competitive with traditional licenced solutions
- Focus moved to design in projects
 - 2 TV projects based on Android
 - 2 TV projects based on RDK
 - 1 semiconductor reference design



ORB Plans For 2023

- Launch 1st TV in market using ORB in Q1
- Further commercial launches in Q2 & Q3
- Maintenance of 2.0.3
- Innovation
 - OpApp
 - HbbTV 2.0.4
 - Targeted advertising
- Setting ORB free



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1.1.5	Site works	2019-10-21	20d	480h	1.1.3				+						
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1.1.7	Roof	2019-12-10	13d	312h	1.1.6										
1.1.8	Inspection	2019-12-23	30d	720h	1.1.7										
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The Open Reb Button will launch as an open source project on

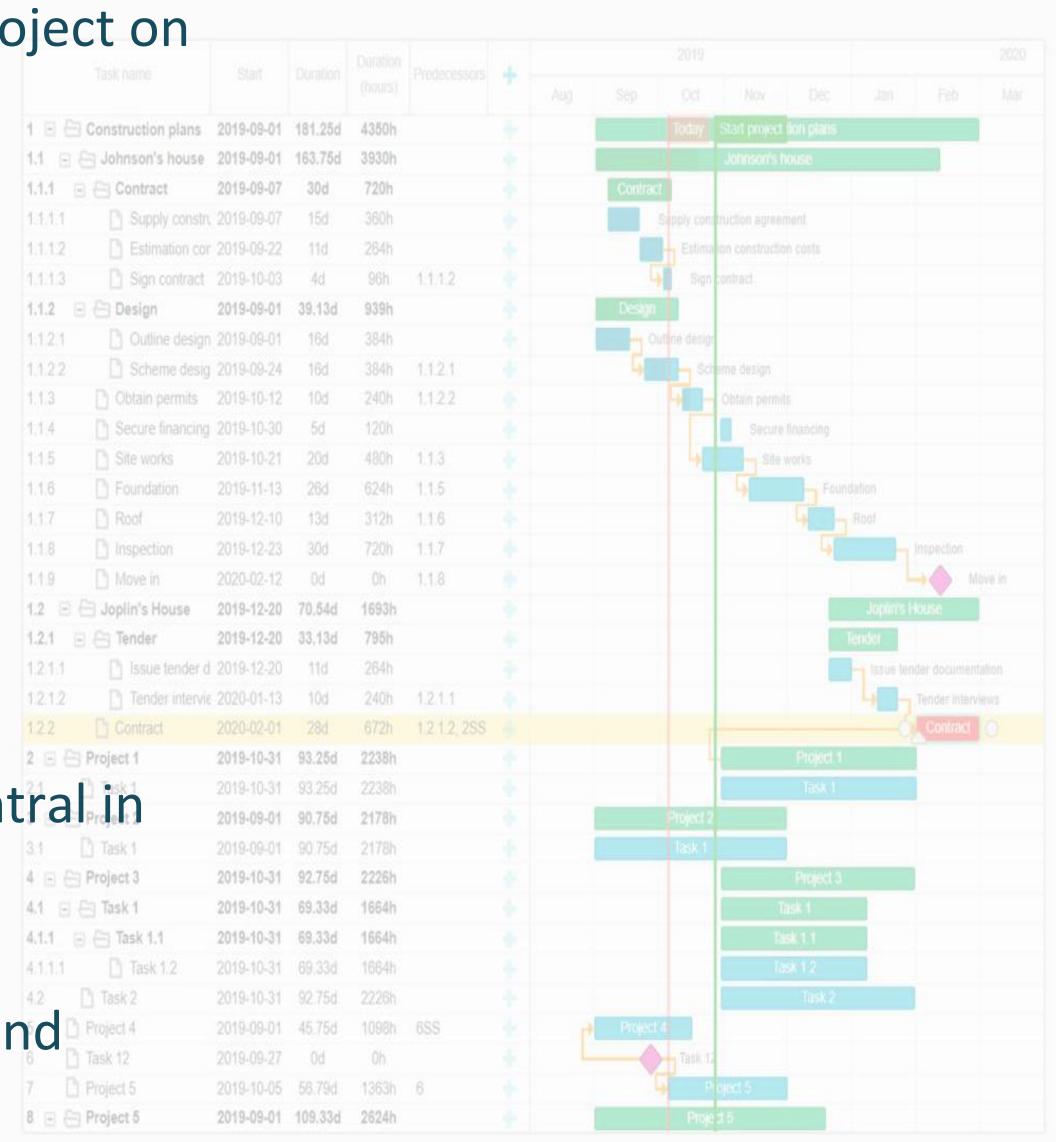
March 31st 2023

https://github.com/OpenRedButtonProject

- Will include
 - source code for reusable components
 - Android reference integration
- Permissive Apache 2 licence
- Initially moderated by OBS engineers
- No fees or royalties

• RDK reference integration will be available via RDK Central in the same timeline.

OBS will offer training, support, maintenance, testing and integration services



Visit our booth for more details and a demo





