

ORB Launching at The 9th HbbTV Symposium

Founded By



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 3 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).
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- European Based (offices in Bristol UK & Athens Greece) and growing rapidly.

ORB 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

- Lowers system costs
- Increases innovation rate



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)



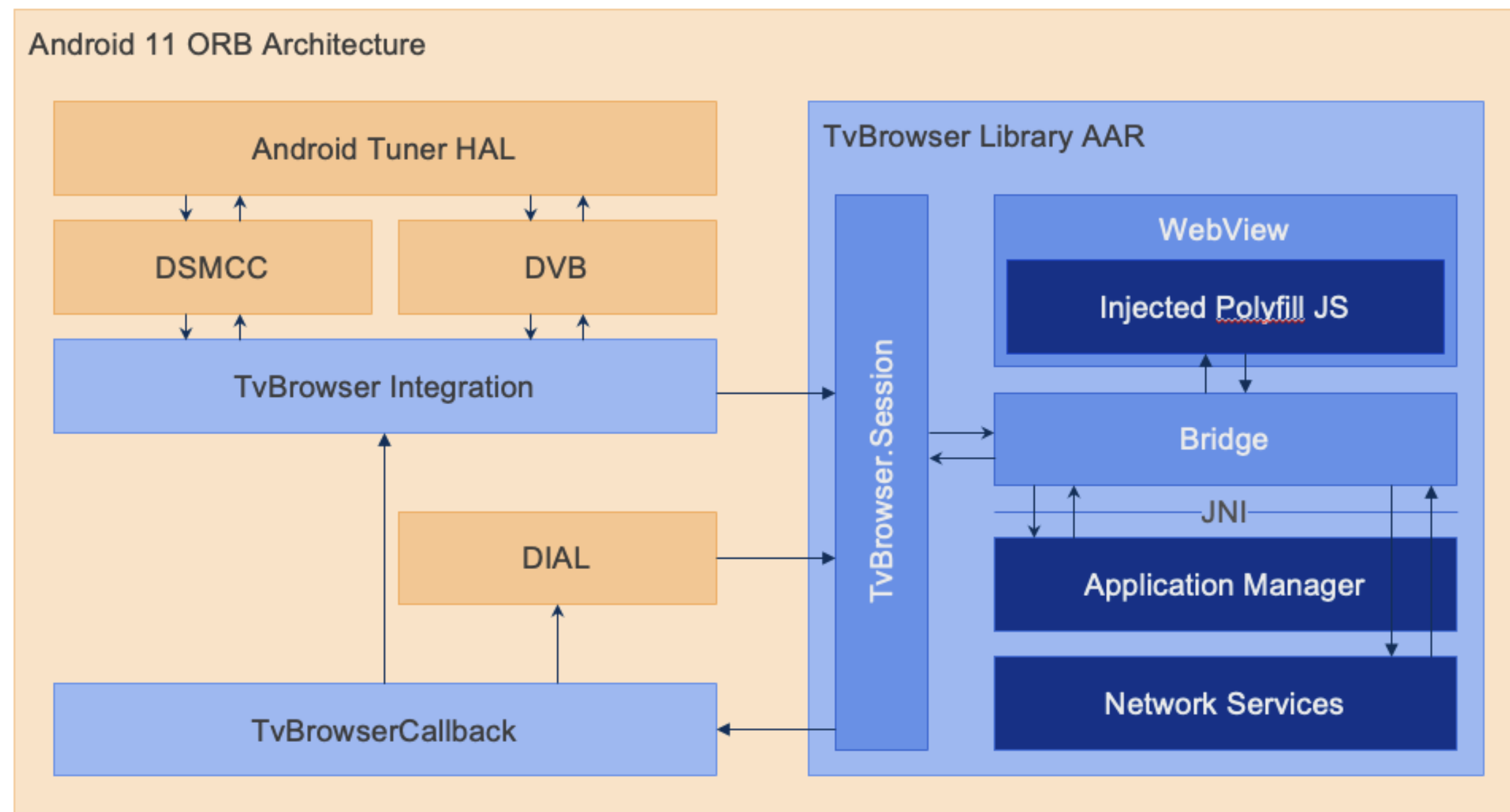
Reference Integrations



Reference Integrations

- Narrow integration interfaces for porting to platforms, browsers, DVB, DSM-CC, media players
- Android 11 and RDK reference integrations available
- Reference integrations use DTVKit components with binaries supplied

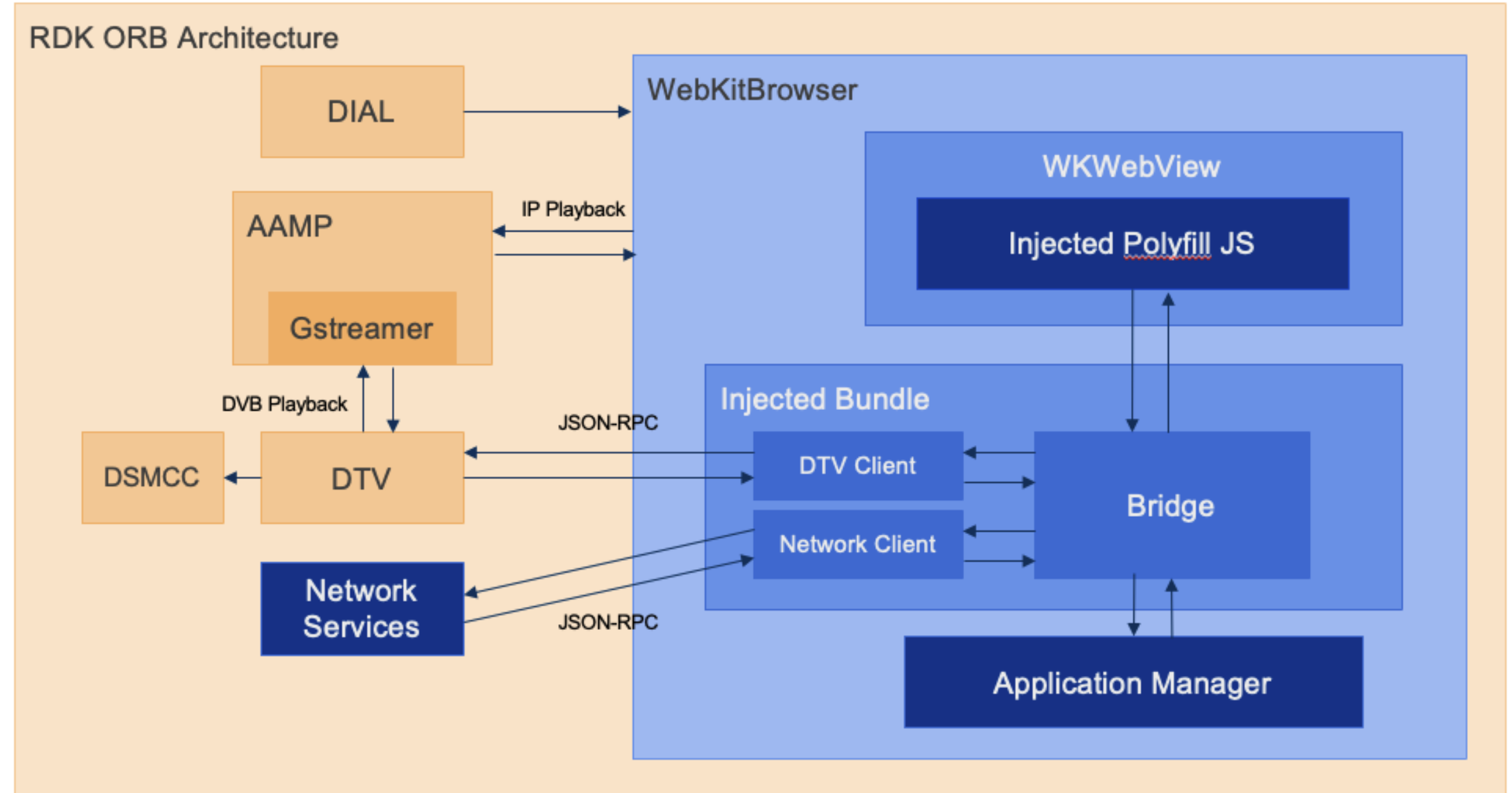
Android 11



Non ORB Platform / 3rd Party Components

ORB Reference Integration Specific Components

RDK 4



ORB Reusable Core Components

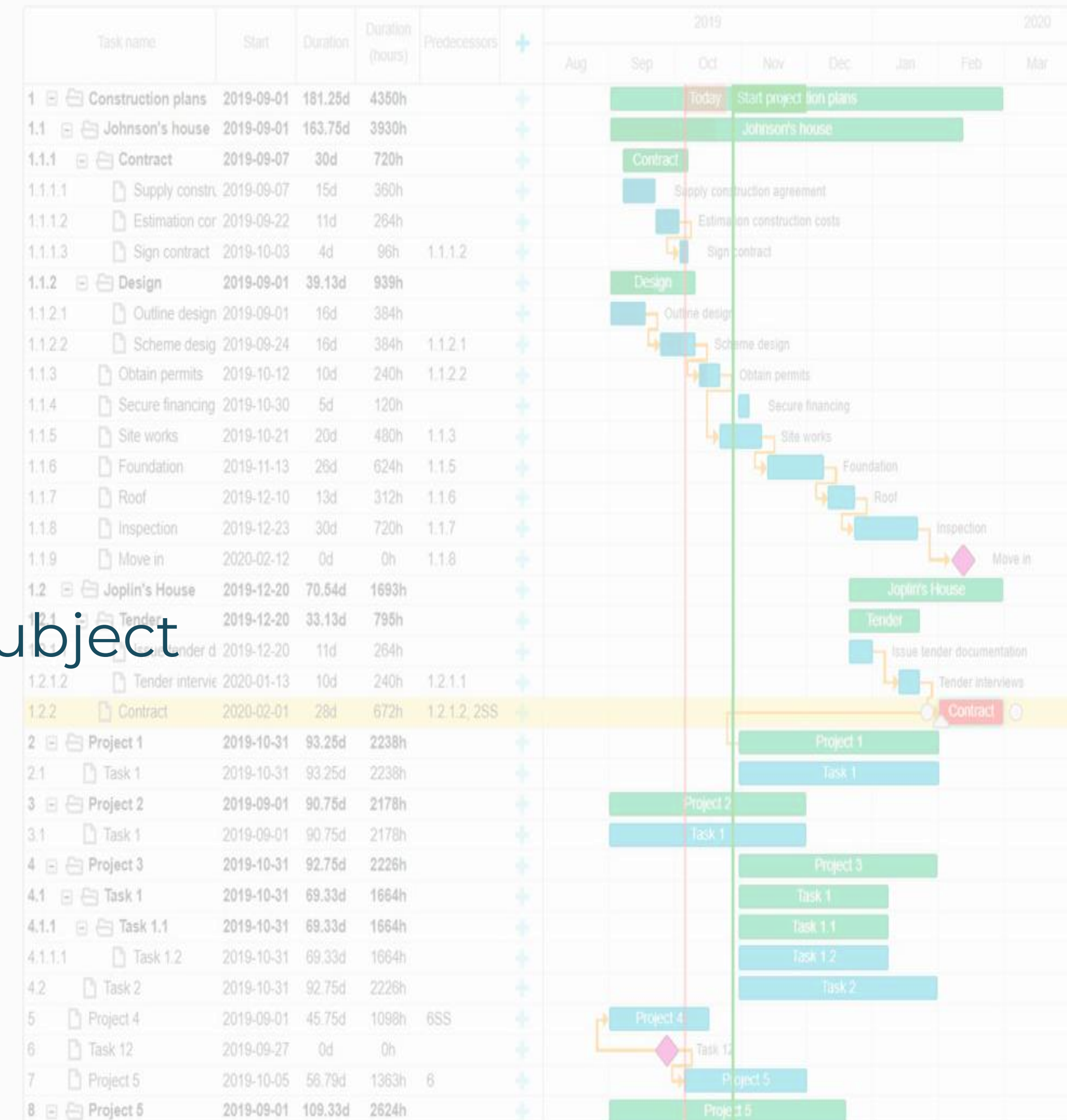


Current Project Status



Status

- Functionally complete for HbbTV2.0.3
- MITExperts tests passed
- Android reference integration in full testing
- RDK reference in progress
- Bug fix complete in Q4 2021
- CI+ & DRM options in progress for Q1 2021
- Other options/extensions will be executed subject to Contributor support
- Will be commercially deployed in 2022





How To Get Involved



What Will The Project Cover

- Source code for reusable core & reference integrations
- Test reports for reference integration
- Option to purchase an STB running a reference integration for evaluation

ORB is a Collaborative Project

- Royalty free source code licence for Supporters and Contributors
- Supporters need only support the objectives of ORB
- Contributors must contribute to development and/or maintenance
- Ultimate objective is migrating to a full open source community



Visit our booth for more details
and a demo

