SRAF HTML5 BROWSER OPAPP EDITION

The cutting-edge Operator Application solution based the latest HbbTV 2 Technology

OPAPP OVERVIEW

OpApp (Operator Application) specification is based on HbbTV 2 to enable operators to provide a common set of services and a consistent, branded experience across a range of smart TV devices. It was published as a standard specification by ETSI TS 103 606 V1.1.1 (2018-05).

With the Blinked-based Sraf HTML5 Browser engine, Sraf HbbTV is a market-proven, platform-independent leading HbbTV solution which is compliant with the latest HbbTV 2 specification and enables manufactures, OEM/ODM, SoC vendors, middleware providers and operators to quickly launch HbbTV capable devices and services with affordable cost.

When compared to regular HbbTV applications, the Operator Application defines deeper control of the device and enables the service discovery without any broadcast signaling. Benefits of Operator Apps compared to Smart TV applications include possibility to publish same application to many different TV brands and enable control of the live TV through the tuner and co- existence with regular HbbTV services.

Operators need to have a bilateral agreement in place with the device manufacturers to deploy their service via OpApp application and the manufacturers are allowed to play more strategic position compared to open field of broadcasted HbbTV apps. Sraf HTML5 Browser and HbbTV solution are ported on the mainstream DTV SoC platforms, which can highly ease the development of OpApp TV with TV manufactures.

Sraf OpApp is leveraging the mature Sraf HbbTV architecture and deployment experience so that customers can develop OpApp enabled STB and Smart TV in a very short time. Sraf OpApp is implemented and validated to be compliant with official specification and test cases released by HbbTV association via the commercial test harness.

SPECIFICATION

Product Highlights

HbbTV Application Manager which is compliant with OpApp specification

OpApp application discovery and upgrade

Easy configuration for OpApp application installation

Extended OIPF adaptor API defined in OpApp v1.0

All Adaptors and Integration APIs are Based on IPC to Avoid Additional Efforts

Product Compliances

Compliant with ETSI TS 103 606 V1.1.1

Browser Core Features

HTML5 (Canvas, Web Storage, Web Components, WebRTC, Web Workers, Web Socket, Audio/Video Tags, Server-Sent Events, Web Cryptography API, Web Animations, WebAudio, WebGL, etc.)

HTML4.01 (XHTML 1.1, XHTMLBasic 1.1, XML 1.1, RSS feed,etc.)

XHTML 1.1

CSS3 (3D Transforms, CSS3, Animations & Transitions, CSS3 Media Queries and Selectors, CSS3 Opacity, CSS3 Outline, CSS3 Background)

CSS1, CSS2.1

Image support: GIF, JPEG, PNG, SVG   Extensions of CE-HTML profiling

Supported CPUs

ARM / MIPS / X86

JavaScript APIs

Application

Application Management

Broadcast Supervisor

Channel / ChannelConfig

Configuration and Settings

Keyset / LocalSystem

Metadata

Metadata Search

Programme

Recording

Recording Scheduler

Scheduled Recording

Video Broadcast

Documents

Sraf HTML5 Browser Integration Guide

Sraf HbbTV Adaptor API Specification

Sraf HbbTV AMP Integration API Specification

Sraf OpApp Adaptor API Specification

Memory Requirements

ROM: < 50MB (ARM Linux as reference)

RAM: < 256MB (Specific for HbbTV functionality)

OpApp application	3rd party HTML5/HbbTV
Customer Specific Extension	OpApp Extension	HbbTV OIPF Extension	HTML5

Sraf Browser

CAS/DRM	DVB	Media Player	OpenGL ES/DFB

Linux/Android Platform