



TARA Systems

in cooperation with



HbbTV Application Discovery over Broadband (ADB)

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HbbTV has become a standard feature of today's TV and set-top-box devices. Many broadcasters already provide HbbTV applications but not all broadcast networks allow to transmit the required application signaling. This results in situations where users experience a lack of HbbTV availability which is caused by the network.

To overcome this gap, the HbbTV Association specified the Application Discovery over Broadband (ADB) standard. It defines the infrastructure and mechanisms that are needed for HbbTV terminals to start the correct applications even if the signalisation is not available.

HbbTV on Android TV with ADB

Together with IRT, we have set-up a showcase that provides HbbTV functionality on restricted DVB networks as well as on OTT services.

Our showcase is based on the NVIDIA Shield Android TV platform running a customised Live TV application as we already presented at Google's AndroidTV Summit at IBC earlier this year. The Inaris HbbTV Solution using Chromium and the ExoPlayer is integrated in the Live TV application on top of the TV Input Framework (TIF) and thus independent of the underlying TV Input Service.

Used Technologies:



chromium

DVB>IP[®]
also known as SAT>IP

Using Different TV Input Services

The demonstration consists of two TV Input Services, where one is based on our own DVB>IP - also known as SAT>IP - client which is fed from a DVB>IP server provided by Digital Devices. This TV Input Service gives access to a DVB-C network and is built on our DVB Middleware Inaris and the VLC player for media playback. The second TV Input Service is the well-known Zattoo service which provides Live TV via OTT. The DVB-C stream delivered by the first TV Input Service represents the situation that can be found in many cable networks where not all services carry the HbbTV signalisation. The OTT service delivered by the Zattoo TV Input Service does not carry any HbbTV signalling at all.

A Unified HbbTV Experience

The integration of HbbTV on top of TIF and the ADB infrastructure allows all services covered by the ADB servers to detect available HbbTV applications, even in absence of the signalisation and across the broadcast networks. With this integration approach and ADB, users have a significant benefit from the unified TV and HbbTV experience, independent of the broadcast network.

Inaris HbbTV Solution

- Fully compliant with the HbbTV standard versions 1.5 and 2.0.1
- Inaris HbbTV SDK runs out of the box
- Browser and DVB middleware agnostic
- Clean interfaces for the browser and middleware integration
- Support of multi-process architectures
- HbbTV 2 components for Android and iOS companion applications
- Well tested with the HbbTV Test Suite

Further information about Inaris HbbTV Solution:

www.tara-systems.de/hbbtv-solution.html



With friendly support of:



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