The Opera hybrid TV option

Deliver seamless entertainment experiences

In Europe, where digital TV and, in particular, high-definition broadcasting is common, broadcasters are actively seeking ways to deliver value-added interactive services directly to consumers' TVs.

HbbTV (Hybrid Broadcast Broadband TV) is both an international standard (that draws from many other standards) and an initiative for harmonizing the broadcast and broadband delivery of entertainment to consumers via connected TVs and set-top boxes. The aim of the HbbTV consortium is to establish one standard for the delivery of broadcast and broadband content through a single web-based user interface. At the root of this initiative is the goal to create an open platform and avoid the roadblocks that can emerge with multiple proprietary technologies. Ultimately, the HbbTV initiative strives to ensure the development of a European-wide consumer market, bringing the lowest costs to manufacturers and highest quality to TV viewers.

HbbTV is a pan-European initiative with its first substantial roll-out happening in Germany and France.
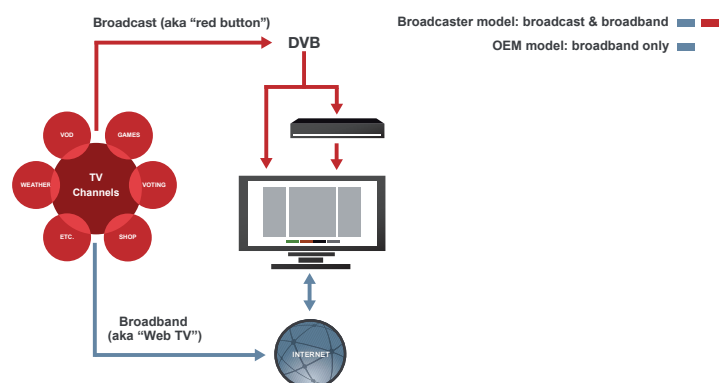
The challenge

Broadcasters, service providers and manufacturers want to improve the TV experience for consumers in several ways. Creating a solution to address this issue required open standards to avoid technology lock-in and a common base from which to work in order to foster the necessary market dynamics for affordable solutions. Opera hybrid TV option solution meets this demand.

The Opera hybrid TV option concepts

Leveraging both broadcast and broadband connections, the Opera hybrid TV option concepts offer the possibility for a wide variety of services including:

- EPG & "Catch-up TV"
- "Hot-spots" linked from content
- "Drill down" content from sports, fashion, advertisements
- Home shopping from actual content
- Voting, polls & quizzes
- Video on demand (VOD)
- Customized tickers & alerts

ARD, ZDF, Arte, France television, TF1, among others, publish portals that are accessible at any time by pressing the "red button". The hybrid TV standard also defines a "Web TV" button to encourage OEMs to develop their own portals while benefiting the framework and APIs.

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Technology enablers: The Opera hybrid TV option

The Opera hybrid TV option is based on the Opera Devices SDK, a proven technology already shipped on millions of set-top boxes and TVs and ported to all the popular chipsets. Opera Software's strong background and extensive experience as a technology enabler has given it insight into how to best help OEMs in the connected-TV arena.

The Opera hybrid TV option implements OIPF, CE-HTML and CEA-2014 compatibility in order to support HbbTV applications, delivered over broadband, broadcast or hybrid. It also implements a HbbTV-compliant application manager and DSM-CC and AIT modules.
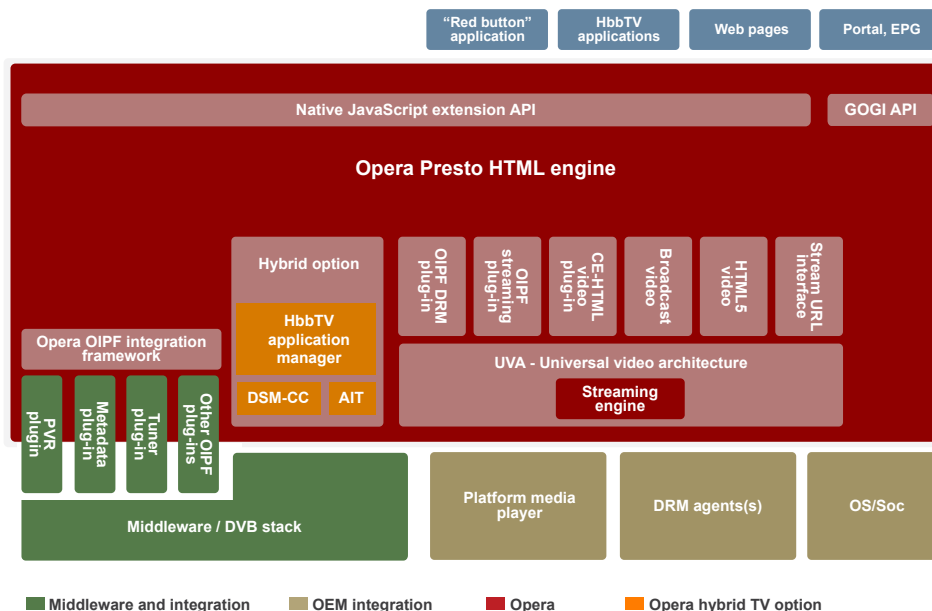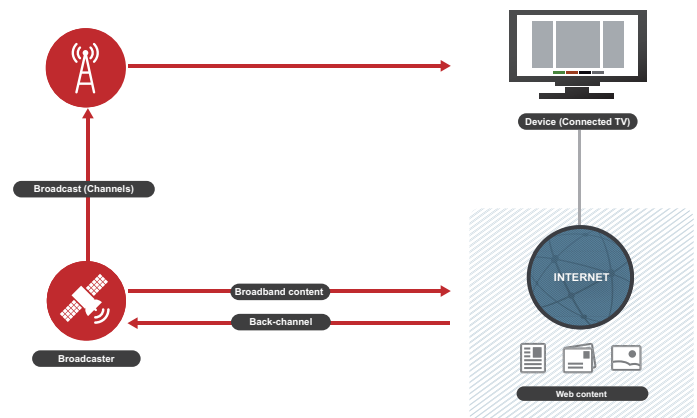
Benefits: Why Opera hybrid TV option?

The Opera hybrid TV option offers numerous benefits to those implementing the option. The advantages of the Opera solution include the standard host of Opera benefits, such as depth of experience in the connected-TV arena, strong partnerships with industry players, being a part of a strong ecosystem of service providers and participation in standards organizations. Opera Software offers proven technology that provides superior performance, speed and integration.

This proven technology coupled with strong partnerships and system-on-chip ports leads to faster time-to-market for OEMs, which in turn leads to more innovative offerings for consumers.

Tuned in

With the Opera hybrid TV option and associated Opera technologies, Opera Software has the tools to help deliver seamless entertainment experiences today and build on the possibilities posed by the future of connected TV.