Opera Devices SDK 3.2

Connected TV within your reach

The Opera Devices™ SDK is a robust, open platform for creating web-standards-based Internet solutions. It provides the ideal foundation for developing connected, interactive TV solutions by combining web applications, widgets and full Internet browsing.

Web standards

Opera Software continuously works to improve its support for web standards. With CSS3 Transforms, DOM elements can now be animated, scaled, skewed, rotated and translated in a very simple manner. With our WebGL** (Web-based Graphics Library) support, we expose the OpenGL 3D graphics API in the HTML5 canvas element without the use of plug-ins, which can be useful for games and device UIs.

TV-related standards

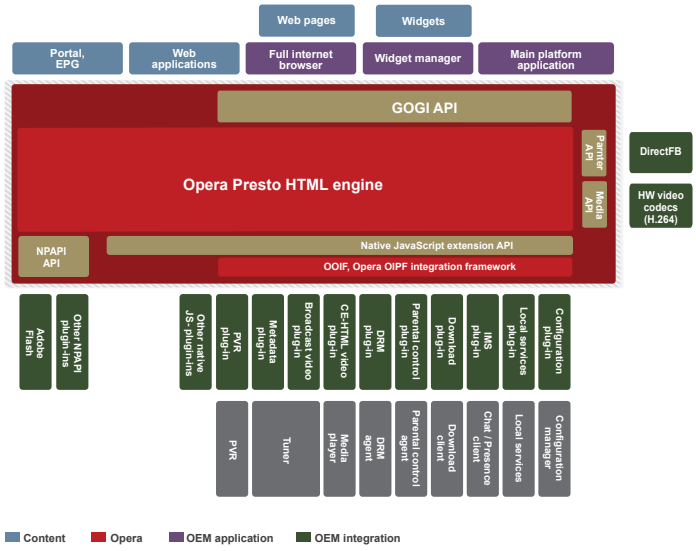
Emerging industry standards are specifying a unified way to render and serve IPTV or hybrid broadcast/broadband services to TVs and TV-connected devices (STBs, Blu-ray players, etc.). HbbTV is an aggregation of components from different standards, such as CE-HTML, CEA-2014, DVB, W3C and OIPF. With the HbbTV option, the Opera Devices SDK provides an out-of-the-box solution for displaying and running “red button applications” and other HbbTV portals and applications.

Video and audio support

The Opera Devices SDK implements HTML5 video and audio elements for full compatibility with modern multimedia web content. With OIPF integration, the Opera Devices SDK also implements the CE-HTML video element for HbbTV and OIPF compatibility.

Increased performance

The Opera Devices SDK uses the most recent version of our rendering engine, Opera Presto, which powers the latest Opera™ desktop and mobile browsers. The latest version incorporates improvements in CSS, DOM and JavaScript modules. The Opera browser uses hardware acceleration, using DirectFB to speed up rendering and animations on many platforms.



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Uniquely positioned to deliver the best Internet experience on any device

Extensions

Define native JavaScript objects and methods to control device functions and create advanced UIs and applications based on web technology. Integrate native plug-ins with the Netscape plug-in API (NPAPI) to bring browsing on devices to a new level.

Open IPTV Forum (OIPF) integration

Using standards defined by OIPF, it is possible to allow web applications and widgets access to TV functionalities such as tuners, PVRs and EPGs. With OIPF, applications using such features can be compatible across different platforms and devices.

Opera Turbo**

Our Opera Turbo™ compression technology is designed to speed up data transfer and reduce the amount of data required to view a webpage. Opera Turbo proxy servers save, on average, 65-75% on bandwidth. Opera Turbo guarantees an uncompromised experience for your users, even when browsing the Internet in slow-performing, wireless-network areas.

Opera Dragonfly

With the remote debugging functionality in our Opera Dragonfly toolkit, web developers and content creators can connect the Opera Dragonfly client in the Opera desktop browser to the Opera browser running on an actual device, such as an STB, and debug content live in the browser. This includes JavaScript debugging, RAM analysis, HTTP logs and other debug options.

Other support

The Opera Devices SDK provides support for extended validation certificates, fraud protection, W3C widgets, HTML5 history API, IPv6 support, OpenGL ES/2.0 backend**, localization, Speed Dial, safe memory handling, site patching, web fonts, SVG 1.1, SVG Tiny 1.2 and more.

A glimpse inside Opera Devices SDK 3.2:

- Powerful and documented APIs for easy integration in your device; source code of reference examples for UIs, JavaScript extensions, plug-ins, etc.
- Membership in OSP, OIPF, DTG and HbbTV forums coupled with concrete roadmap developments
- Available on Linux | Other platforms on request
- Pre-ported to ARM (MTK, Marvell) | MIPS (Broadcom, Trident, Sigma Designs, MTK) | SH4 (ST Microelectronics) | Intel
- 2-15MB per runtime | 1-5 MB per widget | 4-20 MB per open tab
- Footprint on Linux: ARM 10MB | MIPS 12MB | SH4 10MB | x86 10MB

Some of the web standards supported by Opera Devices SDK 3.2:

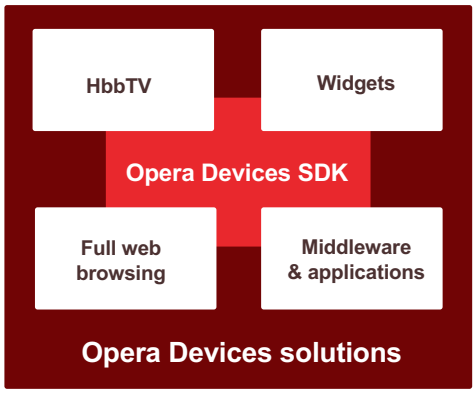
HTML 4.01, 5 (draft) | HTML5 video | XHTML Basic, 1.0, 1.1 | Web Forms 2.0 | XML | CSS Level 1, 2, CSS3 | DOM 2, 3 | <canvas> | HTML 5 Forms | HTTP 1.0, 1.1 | SSL 3 and TLS 1.0, 1.1, 1.2 | Unicode and legacy encodings | SVG 1.1 Basic and 1.2 Tiny, CSS TV, Web GL, HbbTV (option)

An exhaustive list of web specifications is available at:
http://www.opera.com/docs/specs/.

* demo
** beta quality

Acid3 100/100

Opera Devices SDK is 100% Acid3 compliant



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