

Mozilla and OTOY deliver the power of native PC applications to the Web, unveil next generation JavaScript video codec for movies and cloud gaming

HTML5 library enables native Windows apps and media to run seamlessly in any browser whether on desktop or mobile

San Francisco – May 3rd, 2013

OTOY, the Los Angeles based software company empowering next generation cloud streaming services today unveiled, in collaboration with Mozilla, ORBX.js - a JavaScript library that enables Windows, Linux or Mac OSX apps to be virtualized in the cloud and streamed to any HTML5-enabled browser, including those running on mobile devices.

ORBX.js decodes HD video entirely in JavaScript to support plugin free live TV, cloud gaming and watermarked video across all HTML5 browsers, including Firefox, Chrome, Opera, Safari and IE 10.

Native PC Windows Applications without plugins now possible in HTML5

ORBX.js will allow users to run professional desktop applications, which previously required a Windows or Linux desktop PC, through a standard HTML5 Web page, without requiring any plugins or native code extensions.

The companies today demonstrated Autodesk 3ds Max 2014, Adobe Photoshop CS6 and Valve's PC game service running entirely through HTML5 on all major browsers, using only JavaScript.

“Mozilla’s goal is to promote an open ecosystem for content and media on the Web, so that a website looks and runs the same on any device,” said Brendan Eich, CTO and SVP of Engineering at Mozilla and creator of JavaScript. “Thanks to our ongoing efforts in making the web browser faster, JavaScript performance now rivals that of safe native code, allowing OTOY to bring frameworks like this to the Web. The addition of ORBX.js, asm.js and Emscripten continues to accelerate movement away from native, PC apps to Web apps and validates Mozilla’s mission of making the Web the leading platform for app development and distribution.”

Autodesk, Inc., the leader in cloud-based design and engineering software, invested in OTOY in 2011 and forged a partnership to help accelerate OTOY’s technology development roadmap. “Autodesk has spent years pushing the envelope of what’s possible through the cloud, and we’re thrilled to support OTOY’s technological advances to provide greater options for architecting powerful design software across the web,” said Jeff Kowalski, CTO at Autodesk. “What OTOY has accomplished with JavaScript on any web browser promises greater flexibility without compromising performance, and that’s incredibly exciting.”

“OTOY has always focused on bringing the power of cloud computing, whether it’s cloud gaming, application streaming or cloud rendering, to every user with an Internet connection.” said OTOY founder and CEO Jules Urbach, “pure HTML5 is the only platform that universally delivers media and applications to every Internet connected device. We’ve found a way to provide a full native PC experience entirely through HTML5 and JavaScript, without having to touch H.264, Flash, Java, or Google Native Client. It’s a huge win for the open Web and we expect HTML5 to replace legacy operating systems on desktops, TVs, consoles and mobile devices.”

Next Generation HTML5 Video in ORBX.js - keeping the web free from DRM and plugins

OTOY’s HTML5 client is powered by ORBX, a high performance media codec built from scratch to decode 1080p60 video entirely in JavaScript. OTOY’s cloud application hosting software enables CPU and GPU draw commands to be virtualized on a server and then remotely rendered inside a standard HTML5 Web page using the ORBX.js library.

“Mozilla believes that video on the Web should be open and unencumbered. In an ideal world, we’d like to see codecs handled entirely in JavaScript or WebGL. We experimented with H.264 decoding in JavaScript with `broadway.js` previously and came to the conclusion that it was challenging to implement efficiently in JavaScript.” said Vlad Vukicevic, Mozilla Director of Engineering and creator of WebGL. “OTOY’s codec was created from the ground up to run in a modern browser with fast JavaScript and WebGL. It is a remarkable achievement to see a high performance video codec rivaling H.264 that runs entirely in the browser.”

“The movie studios get that HTML5 is the future, and that fragmentation and vendor lock-in is bad for our industry,” said Ari Emanuel, Co-CEO of WME. “Look at Netflix, they’ve dropped Silverlight for HTML5, but are waiting to see if DRM in the browser catches on. This new technology from Mozilla and OTOY just solved this problem for them. You watermark the streams in the cloud, so you don’t need DRM in the browser. It’s a huge asset in the world of piracy prevention.”

###

About OTOY

OTOY Inc. is a pioneer in the field of CG rendering, visual effects software and cloud streaming technology. In 2010, OTOY's LightStage™ tools received an Academy Award® for their role in creating a breakthrough visual effects pipeline for films. For more information about OTOY, ORBX™ and LightStage™, visit www.otoy.com.