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Open video and audio format native implementation in Firefox 3.1 ComputerWorld Review

Mozilla Firefox 3.1 on Its Way to Setting Web Video Standard

Latest nightly build features native Theora and Vorbis encoding support

The latest nightly build of Firefox 3.1 (Shiretoko) has native Theora and Vorbis codecs support. The man behind this implementation is developer Chris Double. This has been in the works for over a year and was considered necessary due to the and tags of the new HTML5 specification, which are also supported by Firefox 3.1.The idea of a standard codec has been debated for a long time, but it seemed like a difficult to achieve goal, because of all the proprietary formats like Adobe's Flash, Apple's QuickTime or Microsoft's Silverlight. At the moment, the most used format seems to be Adobe's FLV (Flash Video), but it makes it impossible for open source software to add native support for it because of its proprietary license. A dispute started when W3C announced the HTML5 Draft and the new and tags, along with its initial plans to have default codecs for them. Because of the many problems this raised, an addition has been released in which the W3C was reluctant to make a recommendation regarding encoders, precisely because of licensing issues, thus leaving the decision up to the software developers implementing it. The addition notes: "It would be helpful for interoperability if all browsers could support the same codecs. However, there are no known codecs that satisfy all the current players: we need a codec that is known to not require per-unit or per-distributor licensing, that is compatible with the open source development model, that is of sufficient quality as to be usable, and that is not an additional submarine patent risk for large companies."Xiph.org Foundation's Ogg Vorbis is "a fully open, non-proprietary, patent-and-royalty-free, general-purpose compressed audio format for mid to high quality (8kHz-48.0kHz, 16+ bit, polyphonic) audio and music at fixed and variable bitrates from 16 to 128 kbps/channel," as described on the product's home page. Theora is a video compression format similar to MPEG-4/DiVX in quality and technical specifications and, even though based on patented open source technology, On2 Technologies, the company owning the patent gives assurances it will never make use of it to restrict the use of the codec.Firefox has a huge user base and acceptance from web developers, which theoretically makes Mozilla less vulnerable to submarine patent lawsuits, as companies would risk in terms of image if such actions were taken, as Mitchell Baker commented at the Products and Technology Roadmap Mozilla Summit session. Mike Shaver, Mozilla’s Interim VP of Engineering, added, "Somebody had to do it. It’s good it was us." By deciding to offer native support for these two formats, Firefox might change the future of video on the web, making open source formats widely adopted, instead of proprietary ones. Chris Double sounds confident that this will happen, noting on his blog that "This original commit is a work in progress. There are unimplemented bits, bugs, etc that need to be sorted out. But it's a start towards using a common codec across all platforms and will improve as we get towards the 3.1 release." He is backed up by developer Christopher Blizzard: "I suspect that the effects of this will take a long while to be felt but it's a great first step in bringing open video to the Web by delivering it to a couple hundred million people around the world."Developers can download the latest nightly build and test the implementation of these new tags by embedding Ogg video and audio into their websites, use the test page set up by Chris Double, or make use of another example he gave, the Wikimedia Commons Video Library, which is already using embedded Ogg media.