MainConcept launches xHE-AAC FFmpeg Encoder Plugin based on audio codec software from Fraunhofer

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Fraunhofer's high-quality xHE-AAC audio encoder is now available as an FFmpeg plugin from MainConcept enabling consumers to enjoy uninterrupted streaming with all types of content.

Fraunhofer IIS, primary developer of the xHE-AAC audio codec, and MainConcept, a leading provider of video and audio codecs, plugins, and applications to the production, streaming, and broadcast industries, are pleased to announce that Fraunhofer's high-quality xHE-AAC audio encoder is now available as an FFmpeg plugin from MainConcept.

xHE-AAC enables consumers to enjoy uninterrupted streaming with all types of content – such as movies, music, audiobooks, and podcasts. xHE-AAC offers maximum coding efficiency with a usable bit rate range that spans from 12 kbit/s to 500 kbit/s and above for stereo services. This helps video and audio streaming providers to overcome audio bandwidth constraints and thereby facilitates an enhanced, more reliable consumer experience. Such efficiency is particularly crucial in emerging markets where consumers often still rely on 2G or 3G connections. Netflix recently reported on their usage of xHE-AAC in their blog post "Optimizing the Aural Experience on Android Devices with xHE-AAC".

Many service providers worldwide are relying on FFmpeg-based ingest and encoding frameworks. Those can now easily be enabled for xHE-AAC audio encoding thanks to the new MainConcept xHE-AAC FFmpeg plugin, which incorporates Fraunhofer's high-quality production encoder software. In addition to the basic plugin functionality, MainConcept offers professional services for service provider-specific workflow optimizations. The xHE-AAC FFmpeg plugin is now available as a free Public Beta on the MainConcept website: www.mainconcept.com/ffmpeg.

"FFmpeg-based ingest and encoding frameworks are commonly used by our service provider customers worldwide and it was our goal to make our production-grade xHE-AAC encoder

broadly accessible and easy to integrate into those existing workflows," says Marc Gayer, Head of Business Department & Deputy Division Director Audio and Media Technologies at Fraunhofer IIS. "This has now been achieved thanks to our long-term partner, MainConcept, and their new FFmpeg xHE-AAC encoder plugin."

"For almost 30 years MainConcept has been recognized as the premier creator of professional audio and video codecs across broadcast, production, and streaming. Our lineup of FFmpeg plugins makes improving audiovisual quality and performance fast and easy for any level of user," says Thomas Kramer, Vice President, Product Management at MainConcept. "The MainConcept xHE-AAC FFmpeg plugin extends this product line to the latest generation of audio codecs."

The MainConcept xHE-AAC FFmpeg plugin implementation has been verified through Fraunhofer's xHE-AAC Codec Test Service that is available for free at www.test.xhe-aac.com.

Created with adaptive streaming via DASH or HLS in mind, xHE-AAC delivers transparent quality under good network conditions and, when necessary, seamlessly switches to the bit rates and quality levels that a congested network can support. Audio bandwidth saved as a result of xHE-AAC's efficiency can be used to improve the video quality.

One of the key features of xHE-AAC is the mandatory MPEG-D loudness and dynamic range control metadata. It allows service providers to embed content- and endpoint-specific metadata in the audio bit stream for transmission which can then be used on the playback side to achieve a consistent loudness level and optimal dynamic range for any playback device and environment. In a living room environment, a film can be enjoyed with the full dynamic range, the way that the mix was intended. The same film on a mobile device in a noisy environment might call for loudness management in order to be enjoyed with intelligible dialog. With MPEG-D metadata, a single stream meets the needs of both of these use cases – and everything in between.

Learn more about the new xHE-AAC FFmpeg plugin in this webinar recording from MainConcept and Fraunhofer
https://www.brighttalk.com/webcast/19022/502080?utm_source=MainConcept&utm_medium=brighttalk&utm_campaign=502080.

About MainConcept

Since 1993, MainConcept® has provided best-of-breed video/audio codec solutions that fuel creativity and business globally for the professional video production, multimedia, broadcast, digital signage, gaming, medical, and security industries. Our software development kits, transcoding applications, and plugins are used across industry verticals to meet an ever-expanding list of use cases. With world-class engineering, exquisite attention to detail, and best-in-class support and professional services, we are constantly innovating to deliver the simplicity needed with the customer experience you deserve. MainConcept codecs are engineered to surpass the challenges of even the most demanding use cases and are used by organizations such as Adobe, Autodesk, Corel, Endeavor Streaming, Grass Valley, MAGIX, Nikon, Playbox, and Soliton. For more information, visit www.mainconcept.com.

About xHE-AAC

xHE-AAC is the latest member of the MPEG AAC audio codec family. Fraunhofer played a substantial role in the development of xHE-AAC and the MPEG-D DRC standard. xHE-AAC is natively supported in the latest Apple, Android, and Amazon operating systems and products, and Fraunhofer's xHE-AAC implementation has recently been licensed to Microsoft. Professional xHE-AAC encoder software is available directly from Fraunhofer IIS or its streaming equipment partners. Fraunhofer is offering a web-based test service that developers and manufacturers can use to validate their implementations of the xHE-AAC® audio codec for compliance with MPEG standards. The service, which is available exclusively at https://test.xhe-aac.com, is free to use upon registration with Fraunhofer IIS and will test both encoders and decoders. xHE-AAC and MPEG-D DRC patents are included in the AAC patent licensing program administered by VIA Licensing at no additional cost.

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This post is also available in: Deutsch 汉语

Link: https://www.audioblog.iis.fraunhofer.com/mainconcept-launches-xhe-aac-ffmpeg-encoder-plugin-based-on-audio-codec-software-from-fraunhofer