MainConcept VVC Encoder Plugin for FFmpeg
Next-Generation 4K & 8K Delivery for OTT and Broadcast

VVC (Versatile Video Codec) a.k.a. H.266 is the next generation codec for the OTT and broadcast market offering improved quality at lower bitrates compared to HEVC and AVC.

THE BEST OF BOTH WORLDS: MAINCONCEPT AND FFmpeg
Widely recognized as the premier provider of professional video codecs, MainConcept developed its line of FFmpeg Plugins so users of the popular FFmpeg open-source software could benefit from MainConcept's highly performant encoders with a simple plugin approach for fast integration. The MainConcept VVC Encoder Plugin for FFmpeg comes packed with features ideally suited for Video on Demand (VOD) and live Over The Top (OTT) production workflows.

IMPROVED COMPRESSION EFFICIENCY PAIRED WITH SUPERIOR QUALITY
The MainConcept VVC Encoding Plugin for FFmpeg is optimized for low-bitrate encoding with superior quality. It supports the VVC/H.266 Main 10 profile, 8-bit and 10-bit (4:2:0). Users can specify Main and High Tier as well as levels up to 6.3. The plugin offers common encoding features such as different rate control modes (e.g., Constant Quantization, Constant Bitrate and Variable Bitrate, etc.), Quarter Pixel motion compensation, deblocking, SAO, etc. Moreover, the MainConcept VVC Encoder supports additional features like deinterlacing, Scene Change Detection, Pyramid B-Frames, etc. You can pass encoding parameters via the FFmpeg command-line or employ ready-to-use MainConcept config files that come complete with all available codec settings.

ON-PREMISE AND CLOUD DEPLOYMENT
The MainConcept VVC Encoder Plugin can be deployed on both on-premise servers and in the cloud, such as AWS, Google Cloud or Microsoft Azure. It is ready for today and built for tomorrow by processing content in up to 8K120. The plugin is suitable for VOD as well as live encoding workflows based on the FFmpeg framework.

The MainConcept VVC Encoder also comes part of the full-featured VVC/H.266 Encoder SDK.

KEY FEATURES
• VVC/H.266 Main 10 profile, 8-bit and 10-bit, 4:2:0 support
• Suitable for VOD and live workflows up to 8K
• Additional feature support for deinterlacing, Scene Change Detection, Pyramid B-Frames, etc.
• On-premises or cloud deployment

CODEC EVOLUTION FOR THE FUTURE OF LIVE & VOD BROADCAST EXPERIENCE
EASY TO INTEGRATE
A simple plugin approach brings MainConcept encoders into new or existing FFmpeg 4.4 (Rao), 6.0 (Von Neumann) or 7.0 (Dijkstra) workflows.

ADVANCED CODING TOOLS
VVC encoding features like CQT, CBR and VBR rate control, Quarter Pixel motion compensation, deblocking, SAO, etc.

NEXT-GENERATION OTT & BROADCAST STANDARD
VVC/H.266 is the future format embedded in SBTVD, ISDB-T, DVB and MPEG-DASH specifications

OPTIMIZE WITH MAINCONCEPT PROFESSIONAL SERVICES

OPERATING SYSTEM
• Microsoft Windows 10, Windows 11 (64-bit)
• Linux x86 Ubuntu 14.04 LTS (glibc2.17), CentOS 7.9 (64-bit)
• Works with FFmpeg 4.4 (Rao), FFmpeg 6.0 (Von Neumann) or FFmpeg 7.0 (Dijkstra)
MainConcept FFmpeg Plugins

The MainConcept FFmpeg Plugins are a highly flexible product line that enable you to use the industry-leading MainConcept libraries seamlessly in FFmpeg-based use cases and environments. The simple plugin approach for fast integration into FFmpeg leads to quick results without the need to change your workflow. Full parameter control of the MainConcept SDK libraries in combination with FFmpeg's built-in components brings world-class video and audio quality to your solution or service. MainConcept FFmpeg Plugins are free to try and easy to integrate into your workflow.

ABOUT MAINCONCEPT

Since 1993, MainConcept has provided best-of-breed video/audio codec solutions that fuel creativity and business globally for 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 you the simplicity you need 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, AVID, Autodesk, Corel, Dalet, Endeavor Streaming, Globo, Grass Valley, Intel, MAGIX, Nikon, PlayBox, Soliton, Sony, Telestream, V-Nova and Wowza. For more information, visit www.mainconcept.com.