





# **FXHOME**

MainConcept powers filmmakers & motion artists to make unforgettable movies

Creating exciting movies on PC and Mac often fails because of high production costs. Especially indie filmmakers and motion artists must always keep an eye on the budget which also covers software for editing, compositing and special effects. With the HitFilm product portfolio from FXHOME, there is an affordable yet powerful solution on the market that helps to overcome these hurdles. HitFilm Pro is an impressive video editor and 3D compositor. It combines a non-linear editing solution with layer-based compositing and visual effects for filmmakers and motion artists. These applications have strong requirements for decoding and encoding technologies.

## **CHALLENGES**

Creating a new software product from a blank slate required a lot of foundation work before its user-facing features could be implemented. With a deadline to go to market, the FXHOME team needed to focus on as many of the features that would help HitFilm stand out from its competitors while minimizing the time they spent on behind-the-scenes functionality that, though critically important, users might never see or could take for granted.

For getting their projects started, filmmakers need to deal with numerous different input formats from different sources. Once imported in HitFilm Pro, users want to preview their projects in the timeline, so that is where a high performance decoder comes into play. And in the end, what should be the best output format to deliver the film event to your audience? MainConcept has the right solutions to overcome these challenges.



### PRODUCT

- HitFilm 4 Pro
- HitFilm 4 Express

### MARKET:

• Indie filmmakers, YouTube creators

### USE CASE:

- Video-editing
- Compositing
- Visual effects

### MAINCONCEPT SDKS:

- AVC/H.264 Pro
- MPEG-1/2
- MPEG-4 Part 2 / H.263
- DV/DVCPRO 25/50
- Audio
- AC-3





#### • AT A GLANCE:

- MainConcept is used for decoding / encoding video
- Lots of foundation work before user-facing features could be implemented
- Minimum time spent on behind-thescenes functionality
- Incorporated a high-quality media framework built by specialists
- Cross-platform MainConcept SDK availability offered smoother path to building HitFilm for Mac OS X
- Wide range of codecs and formats HitFilm wanted to support.

# **SUCCESS STORY**

When looking for a vendor who provides components for both import and export supporting different multimedia formats, one of FXHOME's first matches was MainConcept. The renowned codec vendor has customers in different markets and provides the right codec for many use-cases. In today's creative filmmaking world you need to deal with innumerable content from many sources that an application needs to handle for further editing. Licensing the MainConcept Codec SDK allowed UK-based FXHOME to incorporate a high-quality media framework built by technology specialists in that area. This allowed the whole FXHOME team to focus on their strengths of video, VFX and 3D compositing.

Although initially launched HitFilm only for Windows, the enthusiastic company knew that the cross-platform MainConcept Codec SDK would provide a smoother path to building the video-editing and compositing tool for Mac OS X, too. This was the next logical step the young team later successfully took advantage of. Cross-platform availability for Windows and Mac OS X is nowadays a major USP in the media production market space.

In video-editing and compositing there are versatile requirements for audio and video codec technology in certain stages of the production workflow. HitFilm uses a module which handles import and export of various formats.

MainConcept's core codec technology is employed in this module. For ingest, its audio and video decoders as well as demultiplexers help to load any media file into the software for editing. HitFilm Pro supports a wide range of formats such as AVC/H.264, MPEG-4 Part 2, MPEG-1/2, DV and DVCPRO for video, and AAC, AMR, PCM, WMA, MPEG and Dolby Digital (AC-3) for audio. For previewing, the MainConcept Decoders are used for real-time playback of HitFilm Pro projects, including all effects and animations. The selection of ingest formats already shows the software's flexibility and compatibility with different source content as well as cameras.



After editing, the media format module takes over the project export for delivery. FXHOME converts video frames in GPU based effect rendering and sends processed data back to the powerful MainConcept Audio and Video Encoders such as AVC/H.264 and AAC to turn the project into the desired target format up to full HD resolution. MainConcept Multiplexer components (e.g. MP4 or MPEG-2 Transport Stream) combine the Video and Audio Elementary Streams into files that can be directly uploaded to YouTube or played back on a dedicated device in highest quality to reach a wide audience.

"Along with a solid reputation and proven track record in the industry, MainConcept provided the widest selection of media formats and codecs that we wanted to support." JOSH DAVIES, CEO AND FOUNDER @ FXHOME



FXHOME integrates multiple parts of the MainConcept Codec SDK into HitFilm since many years. Due to the highly flexible yet powerful Low Level API, implementing the MainConcept codecs during development of HitFilm 1.0 was achieved very quickly. In addition, the worldwide professional developer and integration support by the MainConcept Customer Care team was always available for help. In the same way that HitFilm Pro's requirements have expanded, the MainConcept Codec components feature set has been constantly extended and improved. Moreover, the modular and consistent nature of the Codec SDK helped greatly with this task.



# **CLOSING WORDS**

euLion

MainConcept Codecs are widely used in the broadcast industry today. With licensing these market proven components to FXHOME, now also the video-editing and compositing market for independent filmmakers and motion artists is being served. Powering HitFilm Pro with industry-leading codec components, MainConcept enables many end-users to work with and create high-quality content at an affordable price. Supporting many different formats on the ingest side makes HitFilm Pro a highly flexible tool which leaves video editors complete freedom in their camera choices for shooting a film. In the end, the renowned MainConcept Video as well as Audio Encoders guarantee full compliance with most popular devices or media players, so that the content can easily be delivered to the consumers.

FXHOME will continue adding more high-end industry level tools for visual effects and filmmaking while improving performance and accessibility for entry-level creatives. They aim for HitFilm to be the best place for all video creatives to start their journey.

At the same time, MainConcept continues to develop high-quality codecs and streaming components for the broadcast market and other industries to satisfy the growing needs for higher compression in stunning quality of the multimedia market areas. Both companies will strive for entering the next level of their partnership and growth.

# **REQUEST A DEMO:**

MAINCONCEPT SDKs HITFILM 4 PRO

Free evaluation downloads are available for testing.

#### **CONTACT FXHOME**

FXHOME Ltd Suites 4, 27 St Giles Street Norwich NR2 1JN United Kingdom

www.hitfilm.com info@hitfilm.com

#### CONTACT MAINCONCEPT

MainConcept GmbH Elisabethstr. 1 52062 Aachen Germany

www.mainconcept.com sales@mainconcept.com

© 2016 NeuLion, Inc. All rights reserved. NeuLion, MainConcept and associated logos are registered trademarks of NeuLion, Inc. or its subsidiaries. All other company or product names are trademarks or registered trademarks of their respective owners.