

ForensicVideo-FA – Format Analyzer

Software tools for forensic analysis of video files formats

DiViLine software

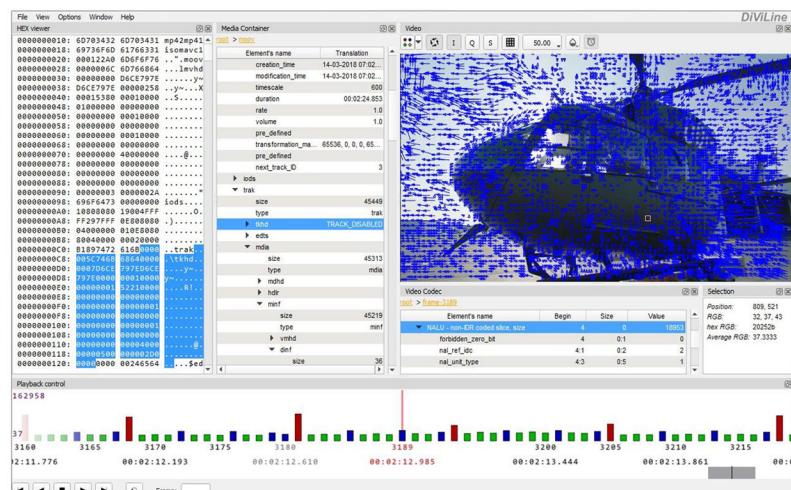
Applications

- Documenting video file properties.
- Search and retrieval of forensically significant elements.
- Establishing the origin of the video file.
- Identification of the video recorder.
- Identification of software that was used to create the video file.
- Establishing the identity of origin for two or more video files.
- Recompression detection.
- Search for changes in video stream parameters for detecting video editing without recompression.

ForensicVideo-FA

Video File Format and Codec Analyzer

Strong forensic video format analyzer!



New features for analyzing the structure of video files.

| Title | Begin | Size | Value |
|-------------------|-------|------|-----------------|
| file | 0 | 32 | 32 |
| size | 0 | 32 | 32 |
| type | 0 | 32 | mp4 |
| major_brand | 64 | 32 | XAVC |
| minor_version | 64 | 32 | 241 |
| compatible_brands | 64 | 32 | XAVC |
| brand | 128 | 32 | av1 |
| tags | 128 | 32 | free |
| brand | 192 | 32 | free |
| brand | 256 | 32 | free |
| size | 256 | 32 | 261624 |
| type | 288 | 32 | moov |
| version | 288 | 32 | 1.0 |
| size | 320 | 32 | 105 |
| type | 384 | 32 | free |
| tags | 392 | 24 | 0 |
| creation_time | 392 | 32 | 1373302107 |
| modification_time | 448 | 32 | 1373302107 |
| duration | 512 | 32 | 605055 |
| rate | 512 | 32 | 1.0 |
| volume | 576 | 16 | 1.0 |
| pre_defined | 640 | 32 | 0 |
| transformation_ma | 672 | 32 | 65536, 0, 0, 65 |
| pre_defined_0 | 672 | 32 | 3 |

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GoPro Hero3 vs Sony HDR-AZ1

GoPro Hero3 vs ffmpeg recompression

ForensicVideo-FA allows to get/see and analyze:

- The structure of the container in a tree (window «Media Container»).
- The structure of the encoded video a tree (window «Video Codec»).
- Summary information about each video frame (window «Frame»).
- Information on each macroblock (window «Macroblock»).
- Visualize of motion vectors, quantization levels, sizes, types and partitioning of macroblocks.
- Binary data corresponding to the individual elements of the video (window «HEX viewer»).
- Summary information about the video file (the type of audio or video codec, file creation time, etc.) based on MedialInfo end ExifTool.
- Comparing video file structures (elements of mediacontainer's tree, elements of video codec's tree, MedialInfo and ExifTool summary information).

search
compare
identify



DiViLine
Special Video Systems