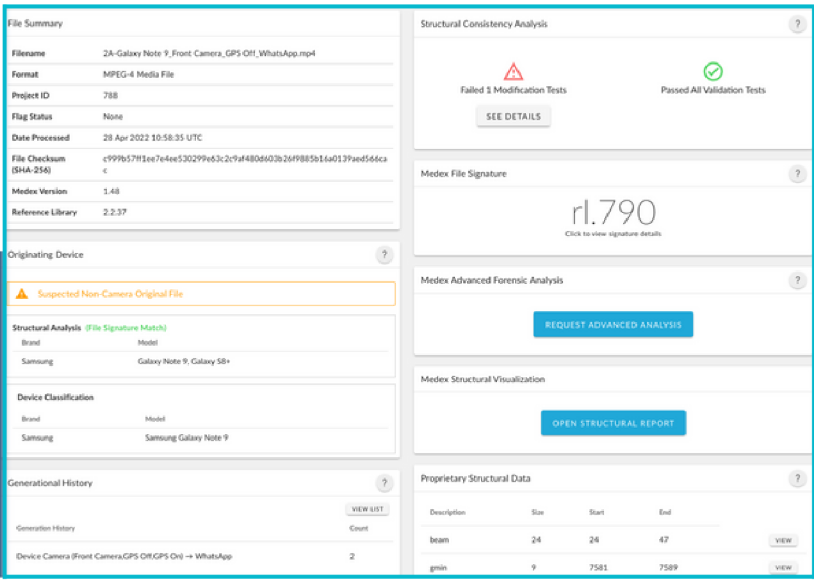
MEDEX FORENSICS

REVEALING THE TRUTH IN DIGITAL VIDEO

Unlike any other software, Medex reveals information that is not present in the metadata of a digital video file. With this additional intelligence, investigators are answering new questions about video and identifying additional crimes and perpetrators in previously impossible ways.



File Summary

Filename	2A-Galaxy Note 9_Front Camera_GPS Off_WhatsApp.mp4
Format	MPEG-4 Media File
Project ID	788
Flag Status	None
Date Processed	28 Apr 2022 10:58:35 UTC
File Checksum (SHA-256)	c999b57ff1ee7e4ee530299e63c2c9af480d603b26f9885b16a0139aed566ca c
Medex Version	1.48
Reference Library	2.2.37

Originating Device

⚠ Suspected Non-Camera Original File

Structural Analysis (File Signature Match)

Brand	Model
Samsung	Galaxy Note 9, Galaxy S8+

Device Classification

Brand	Model
Samsung	Samsung Galaxy Note 9

Generational History

Generation History	Count
Device Camera (Front Camera,GPS Off,GPS On) → WhatsApp	2

Structural Consistency Analysis

Failed 1 Modification Tests

Passed All Validation Tests

Medex File Signature

rl.790

Click to view signature details

Medex Advanced Forensic Analysis

Medex Structural Visualization

Proprietary Structural Data

Description	Size	Start	End
beam	24	24	47
gmin	9	7581	7589

MEDEX ADVANTAGES

- Rapidly identify CSAM production
- Authenticate citizen-submitted videos
- Triage videos from mobile device extractions -- expedite actionable intelligence
- Identify deepfake videos
- Detect tampering or modification of digital videos
- Uncover seemingly hidden metadata
- Collaborate internally or externally on video examinations

> *"Medex analysis allowed us to rapidly identify CSAM production on a device.*
>
> *Without Medex this would have not been possible. "*
>
> **K.S.**
>
> Special Victims Unit Detective

> *"I'm loving the Medex tool and can see how the application can enhance our ability to verify and analyze videos submitted through our citizen portal/links."*
>
> **J.V.**
>
> Imaging Unit Manager

VIDEO SOURCE IDENTIFICATION

Where did this video come from? How did it arrive on this device? Medex reveals the history of a video file's lifespan. From the device that created it to how it arrived on your doorstep, Medex can identify the various devices, models, and software programs (including video editing tools) that the file passed through. Medex has been proven effective on video files from cell phones, camcorders, CCTV systems, and social/sharing platforms, only using a singular video file for analysis.

VIDEO AUTHENTICATION

Has this video been manipulated? Medex employs a series of proprietary testing algorithms to evaluate a video file and report any potential manipulation or authenticity issues. Medex's approach to evaluating manipulation is not tied to image content, but rather to a file's internal structure; in other words, no matter how real the video looks, it can still be effectively evaluated.

KEY METHODOLOGIES

Structural Analysis

Medex uses a unique combination of file structure analysis and device classification to identify the device that originally recorded a video file as well as any means of transmission of the file and/or other software it has passed through. This not only can generate investigative leads, but also can identify manipulation by detecting the presence of editing software in a video's history.

Metadata Analysis

Using custom designed parsers for forensic use, Medex will report all metadata in a file, including the presence of proprietary or non-decipherable metadata elements that other tools may omit.

Modification Analysis

Medex runs each file through a set of format-specific logical tests to determine if a file has been modified or potentially modified at a binary level.

> *Medex Forensics' 2-day training solidified my desire to want to continue on with the purchase of the Medex product. When I first started looking at it, I was like… "is that it? Is that all it does?". Now, after the Medex Forensics 2-day training course, I can see where the product fits in, in the analysis and authentication process, and how it kicks ass compared to other techniques.*

E.K.

Digital Forensic Specialist

EXPAND YOUR CAPACITY WITH MEDEX

The Medex platform gives you access to the largest vetted reference library of known video encoding so that you can solve cases faster, identify leads, distinguish real from fake, detect tampering, and examine every bit of available evidence from digital video in your investigations.

TECHNICAL FEATURES

- Custom forensic digital video parsers
  Purpose-built to be transparent & comprehensive.
- Fast video source categorization
  Quickly triage files based on originating camera, processing software, and edited/modified.
- Medex reference library of known exemplars
  The most comprehensive collection of known brands/models, software apps, and social sharing platforms to provide accurate results.
- Individual or large quantity analysis
  Conduct investigations at scale while retaining the ability to dive deep into results for any single file.
- Remote and local processing
  Process files on either Medex's secure AWS GovCloud infrastructure or your local computer/network.
- API licenses
  Use Medex's output in your own processing pipelines, e.g., in acquisition or evidence ingest workflows.
- Flexible licensing
  Medex offers a variety of licensing options that align to your agency's budget and investigative needs.

BECOME AN EXPERT WITH MEDEX

Advanced Digital Video Forensics Training

- ▸ Understand how video files are created/stored
- ▸ Identify source devices
- ▸ Interpret complex metadata
- ▸ Detect deepfake videos
- ▸ Examine video posted to social media platforms
- ▸ Articulate expert results

Medex Certified Media Examiner (MCME)

- ▸ Flagship certification in media examination
- ▸ Demonstrate proficiency in complex source identification and authentication cases

FOR MORE INFORMATION

Medex Forensics provides examiners the newest automated tools for digital video authentication, source detection, and provenance analysis. Medex's patent-pending approach to examining digital video provides investigators and prosecutors new insight into digital video.

To learn more about how Medex can enhance your daily workflows, contact our sales team at sales@medexforensics.com.

ABOUT MEDEX FORENSICS

At Medex Forensics, we develop and deploy novel technology to identify child predators, to fight digital crime, and to combat disinformation. Designed and built in the United States and engineered to provide cutting-edge technology for public safety, the company's flagship product, Medex gives investigators previously unavailable insight into the origins and authenticity of digital video files. Medex is used and trusted at agencies throughout the US, and across the globe.