![NAGRA KUDELSKI]

FORENSIC WATERMARKING

NATIONAL FILM ARCHIVE ORGANIZATION PROTECTS CONTENT

A film archive organization in China preserves national and foreign content titles. As one of the only national organizations undertaking film preservation, it required a solution to protect a library of over 30,000 films from piracy.

Opportunity: Given the prevalence of piracy, the film archive organization needed solutions to help them adhere to content owners' security requirements. Ideally, the answer would provide a strong deterrent against leaks alongside an ability to rapidly detect the source of leaks to protect the value of the film archive.

Collaboration: The film archive organization partnered with NAGRA to protect its valuable content. The solution securely supports both the import and export of movies from the archive and is integrated with existing workflows to minimize overheads. NAGRA NexGuard Forensic Watermarking does this by applying imperceptible watermarks to content prior to it leaving the archive before being distributed to screening rooms, film festivals, or other production houses. The watermarking allows the film archive organization to trace any illicit distribution of the content once it has left the archive.

Benefits:

- Investments in archive content are protected during import and export; ensuring sources of illicit use are detected

- Watermark a wide range of content, from full features (in DCP) to some clips (in MOV)

- Watermark is imperceptible on audio and video files and does not impair performance or quality

- Allows the film archive organization to comply with the security requirements of content owners

- Easily integrated into existing media asset management solutions

NAGRA KUDELSKI PORTFOLIO SPOTLIGHT:

CLIENT
Film Archive Organization

COUNTRY

SOLUTION
NexGuard Forensic Watermarking

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Securing the content we have in our archive is critical and allows us to preserve the value and investment we've made in our video and audio content. NAGRA NexGuard Forensic Watermarking has a crucial role in helping us do this and secure against illicit use."

- Senior Executive,
Film Archive Organization

VALUE DELIVERED

SOLUTION VERSATILITY

NAGRA NexGuard forensic watermarking provides film archives with a range of tools through which they can protect their collections. These include NexGuard plugins for transcoders where content is simultaneously watermarked and transcoded.

For film archive owners with existing Media Asset Management (MAM) solutions, NAGRA NexGuard forensic watermarking can be seamlessly integrated with NexGuard File Embedder, which requires no additional file transcoding for ProRes 422 and 4444, as well as XDCAM. The NexGuard File Embedder has also been optimized for ProRes and XDCAM, with a watermarking process several times faster than real-time. Any MAM can easily integrate the NexGuard API for seamless deployment and automation of NexGuard into a distribution workflow. The NexGuard Manager also provides a 360-degree view of all NexGuard watermarking operations.

FULLY ALIGNED TO FILM ARCHIVE PROCESS

NAGRA NexGuard forensic watermarking has been seamlessly embedded into existing national film archive processes.

- On import: content arrives at the film archive organization on videotape, and during digital conversion, the watermark is added before the DPX file is stored

- On export: the film archive organization uses the NexGuard File Embedder to add a watermark before screening (film screening rooms, art house theaters, film festivals) or before distribution to third parties for activities such as film preservation and film research.

- After digital restoration, content can be watermarked before being added to the archive.

SECURING IN-ARCHIVE & EXTERNAL DISTRIBUTION

To prevent leaks during in-house archive operations, such as film restoration, cataloging, or package editing, the national film archive organization can use NexGuard's audio and video forensic watermarking to trace detected leaks back to the service or third-party responsible for the leak. This traceability is a powerful deterrent to those looking to illicitly benefit from the archive's valuable content collections.