



## NEXGUARD FILE EMBEDDER

SECURE YOUR POST-PRODUCTION AND DISTRIBUTION WORKFLOWS

In the post-production industry, high resolution video files (up to 4K HDR) are often circulated well in advance of consumer release. Any leak occurring on pre-release or pre-aired content has a very high negative impact on revenues and marketing activities. To prevent this, studios and content owners can apply forensic watermarks to their content throughout their post-production and distribution workflows. This allows for the tracing of any leak back to the specific department or third party that was responsible for leaking the content. This traceability provides a strong deterrent against leaking and piracy.

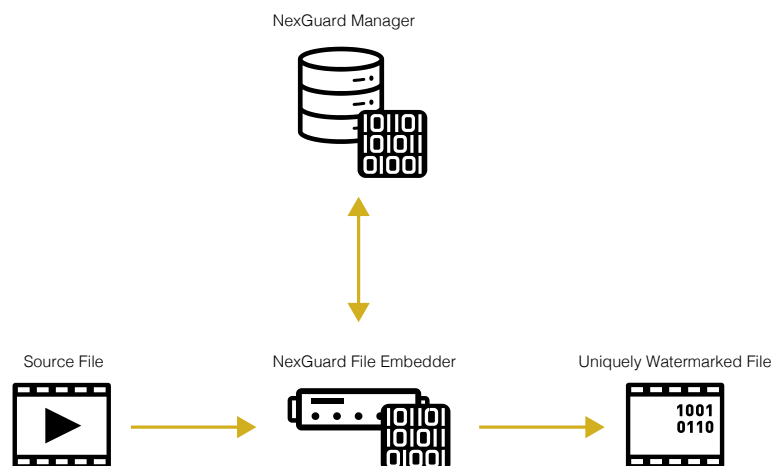
**NexGuard File Embedder** contributes to the protection of digital content for post-production workflows. It adds a unique, robust and imperceptible forensic watermark to each

copy of the content. This process is fully automated, scalable and administered by the NexGuard Manager, providing a centralized view of all NexGuard watermarking activities within an organisation.

**NexGuard File Embedder** is optimised for key mezzanine file formats and is easily interfaced with third party workflow management or media asset management (MAM) applications.

**NexGuard File Embedder** is supported by the NexGuard Detection Service, a cloud-based forensic watermark extraction service. It is fast, highly scalable and fully automated, meeting the needs of content owners who require detection in conjunction with an anti-piracy service.

Features	Benefits
Stand-alone video watermarking solution for commonly used mezzanine file formats	No additional file transcoding; the input and output video formats are the same
Watermarking speed optimized for ProRes and XDCAM formats	Watermark ProRes and XDCAM files several times faster than real time
NexGuard forensic watermarking technology optimized for the best robustness and imperceptibility for pre-released and pre-aired content	Proven forensic watermarking technology deployed by Studios and Content Owners for over 10 years
Support for multi-layer watermarking and compatible with other NexGuard pre-release and session-based watermarking solutions	Multiple NexGuard watermarks can be applied to the same content, enabling traceability throughout the entire content workflow
Watermarking information administered and stored in the NexGuard Manager	Centralized database providing a unified view of all an organisation's NexGuard watermarking activities
Supported by the NexGuard Detection Service	Rapid NexGuard forensic watermarking detections through a self-service portal or automation APIs



## SUPPORTED FILE FORMATS

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- ProRes (Apple-certified for all profiles: 422, 422 LT, 422 HQ, 422 Proxy, 4444, and 4444 XQ)
- XD-CAM (MPEG-2-HD long-GOP in MXF)
- YUV (Uncompressed UYVY 422)
- Uncompressed AVI (UYVY 422 and YUY2 422)
- DPX 10-bit Linear and Logarithmic RGB
- DV25 (411)
- MPEG2-SD PAL or NTSC (Intra 422@Main in TS)

## PROCESSING PERFORMANCE

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- ProRes 422 HQ 1080p 23.97fps at 170Mbps: Up to 5 times faster than real time on a 10GigE network
- ProRes 422 HQ UHD 25fps at 545Mbps: Up to 1.5 times faster than real time on a 10GigE network
- XD-CAM / MPEG2 long GOP HD 422 1080p 23.97fps at 50Mbps: Up to 2.5 times faster than real time on a 10GigE network

*Tests performed on HP ProLiant DL360G9 servers, with SSD drives and Server 2012R2 OS.*

*Please note that performance may vary depending on your network configuration and hardware specifications for the NexGuard File Embedder and NAS.*

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