Secure, Real-Time Watermark Detection For Effective Piracy Monitoring

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OTT Video creates a Perfect Storm for Pirates

• Effectively monetizing streamed media is one of the biggest challenges facing content providers today.
• Streaming will continue its meteoric rise as one of the primary means of content consumption
• Monetization challenge: “you can’t monetize what you can’t identify”

Content owners are now asking themselves how, not whether, they should be executing a strategy to mitigate the impact of Video Piracy
DMCA Notices: Necessary but not Sufficient

• Does issuing DMCA takedown notices alone constitute a “strategy”
• DMCA notices reduce the availability of pirated content
• Pirate content originates from multiple sources which cannot be identified
• Identifying where the leak came from is essential for any anti-piracy strategy

Only comprehensive forensic watermarking can identify the source
Introduction to Digital Watermarking

• Digital Watermarking is a signal processing technique to embed a pattern of bits dispersed into the digital image, video or audio content

• Digital Watermarks are designed to be imperceptible to the human eye, or in the case of audio clips, to be inaudible to the human ear

• The main purpose of digital watermarks is to provide forensic track and trace capabilities to deter unauthorized distribution of high value digital content

Digital Watermarking: The only proven method to effectively deter piracy
Digital Watermarking use cases

• MovieLabs Published the Enhanced Content Protection Guidelines document for 4K UHD Content mandating watermarking

• Watermarks are embedded by many different stake holders throughout the distribution chain
  • Pre-release Screeners
  • Digital Cinema
  • Set-Top Box
  • OTT

With multiple sources and multiple watermarks, how do we identify which watermarking technology has been used?
What’s needed: Identify the Source

- Create an open source watermark identifier standard.
- Integration into all distribution channels
- Detectable within a few seconds
- Embedded basic information
- A watermark “Heart Beat”

How do we implement real-time watermark detection in our monitoring systems?
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Panelist Q&A

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