Open Watermarking of EIDR Identifiers

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EIDR
Ad-ID
KANTAR MEDIA
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cimm

Overview

What Are Audio Watermarks?

- Audio watermarks are identifiers injected into an audio signal that are inaudible to the human ear but can be recovered by digital signal processing
- There are several audio watermarking technologies deployed today
  - DVSI
  - Kantar Media
  - Nielsen
  - Verance
- Each has their specific application strengths

Benefits of Audio Watermarks

An open standard for ID-to-asset binding can enable a wide array of capabilities:

Increased speed, transparency and accountability in video content and advertising measurement

Improved media workflow automation within and between M&E entities

Fewer barriers to deploying **cross-platform dynamic ad insertion**

Enablement of new **anti-piracy and copyright protection tools and methods for video and music**

Triggering **surveys, quizzes or coupons on mobile devices**

Standardized **tracking of assets and audience measurement across media platforms**

Accelerated **digital content locker adoption and complete long-tail content monetization**

Improved **automated content recognition and detection**

Better **second-screen integration** and improved **multi-screen content discovery**

On-the-fly **media asset assembly**

Reduced **asset storage and transmission costs**

Simplified and **less-costly media reconciliation**

Open Watermarks Standard

- CIMM worked with the Society of Motion Picture Television Engineers (SMPTE) to develop a specification for most use cases of audio watermarking and selected a technology provider based upon extensive tests
- Kantar Media Technology was selected
- Open Binding of Identifiers (OBID) – standardized technology used to identify **content and ads** via an open common method
  - Carries Ad-ID and EIDR identifiers
- OBID-TLC (Time Labels to Content) – standardized technology used to identify **content and ad distribution** via and open and common method
  - Includes a unique distributor identifier and a time/date stamp of when the content is aired

Open Watermarks Standard

- CIMM worked with the Society of Motion Picture Television Engineers (SMPTE) to develop a specification for most use cases of audio watermarking and selected a technology provider based upon extensive tests
  - Suitable for detection via microphone, a hardwired connection, or as a software object embedded in a consumer device
- Kantar Media Technology was selected
- The audio watermarking technology does not interfere with:
  - Nielsen
  - Anti-piracy watermarks
  - New ATSC 3.0 (VP1) watermark

Open Watermarks Standard

OBID and OBID-TLC

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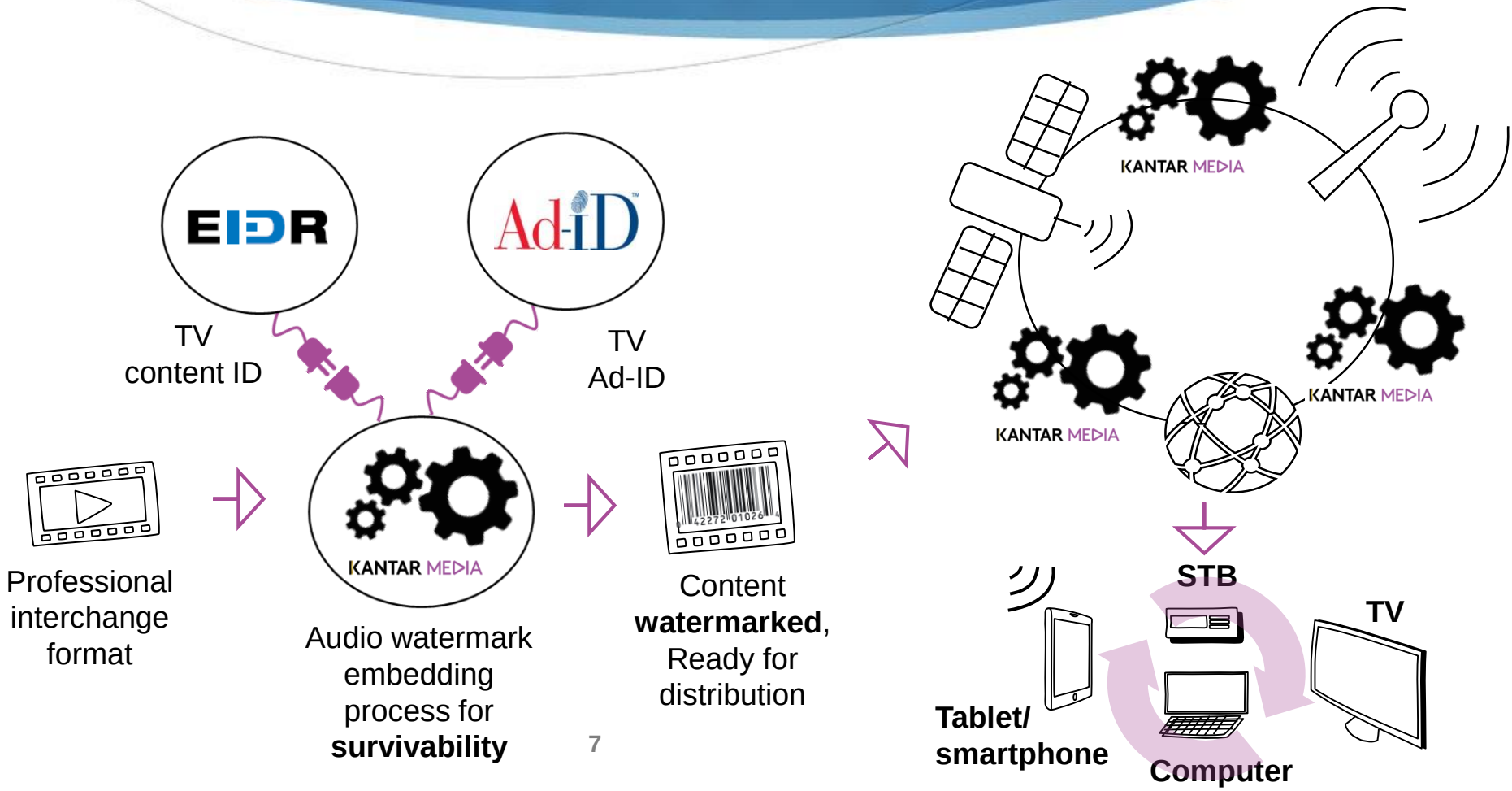
How Does That Work?



Proof of Concept Objective

Prove the Value of the Technology

- Demonstrate the value of binding EIDR into CIMM member's video content
- Demonstrate the value of Ad-ID to track ads through the broadcast workflow
- Show how audio watermarking and other toolsets can be utilized for tracking content and ads through cross platform content identification
- Document and address key use cases

Test Plan

- Demonstrate acoustic detection of EIDR and Ad-ID OBID watermarks inserted with the Kantar Media file based watermarking tool
  - 7 ads
  - Fox content
  - ABC B-roll
- Demonstrate insertion and acoustic detection of OBID-TLC watermarks using the real-time watermark embedder
- Provide feedback on the installation, configuration, and operation of the real-time OBID-TLC embedder
- Provide a test result file of resolved EIDR and Ad-ID data collected from the test content

Test Overview

- Content was assembled/played back in a linear fashion

- When content was played back through the real-time embedder it was captured into a file containing OBID and OBID-TLC codes
- Capture the detection of EIDRs and Ad-IDs on an Android tablet detection tablet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Conclusions

- The phase 1 lab tests of the technology are complete and were successful
- Standardization of the technology through SMPTE is nearly complete
- Adaption of the open technology will foster innovation of new media products, whether it be audience measurement, cross platform measurement, interactive services, content tracking, second screen applications, and more.
- CIMM and its partners will be hosting workshops and lab tests in the future
  - Looking for input on these workshops and lab tests
  - Interested in ideas for new innovative applications

Thank you!

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EIDR

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