

MDN Workshop

20 June 2012, Geneva

09:00 **Welcome**

09:15 **Embedded metadata in MXF**, *Dieter Van Rijsselbergen, Limecraft*

The Material Exchange Format (MXF) has by now become the de facto standard for file-based media exchanges. Even though MXF is incredibly rich in features and flexibility, handling MXF files, and in particular, the metadata that describes the essence within them is still a complex matter as there are many ways in which metadata can be associated with MXF (e.g., as side-car information, as dark metadata or as properly encoded and standardized metadata sets, ...). In this session we will discuss and demonstrate a number of recent initiatives and developments, supported by the EBU and the AMWA, that aim to make the association and processing of MXF metadata easier and more accessible for application developers.

10:00 **Using the MPEG-7 Audiovisual Description Profile (AVDP)**, *Werner Bailer, Joanneum Research*

The Audiovisual Description Profile (AVDP) is a profile of the MPEG-7 multimedia description standard, targeting applications in audiovisual media production and archiving. AVDP has been developed by the EBU MIM/SCAIE working group and has recently become an ISO standard. A main motivation for the definition of the profile was to provide a standard representation for the results of automatic information extraction from audiovisual content. This presentation will give an overview of the capabilities of the profile and demonstrate the tools and libraries that are available for putting the profile to work based on some exemplary use cases.

10:45 **Coffee**

11:15 **Automatic Semantic Annotation of Video Content**, *Patrick Ndjiki-Nya, Fraunhofer*

Current search engines predominantly rely on image-related metadata (such as manually assigned tags, keyframe description or text surrounding an image in a document) for retrieval. This leads to inaccuracies when text descriptions misrepresent image content. Thus, alternate approaches which rely on video content understanding for automatic annotation and retrieval are needed to address such inconsistencies. The Fraunhofer Heinrich Hertz Institute thus develops technologies to automatically assign keywords to videos. This complements the otherwise inaccurate and tedious manual keyword assignment process, hence enabling more effective search in video collections.

12:15 **Lunch**

13:15 **EBU Core mapping tool**, *Vassilis Tzouvaras, NTUA*

Aggregation and indexing initiatives, illustrate the benefits and added value of metadata interoperability for repository owners and the end user. Modeling efforts are directed in facilitating the aggregation of diverse, proprietary metadata records under well defined, machine understandable reference data models, such as the EBU Core model. However, the mapping and transformation procedure is not always a straightforward task, varying according to existing infrastructure and data and requiring the involvement of domain experts and content providers.

The EBU Metadata Interoperability is a web based platform that is employed from the first steps of such workflows, corresponding to the ingestion, mapping, transformation and enrichment of metadata records. According to the architecture, EBU MINT implements a variety of remediation approaches for the resulting repository that allow for the storage, delivery, access and retrieval of metadata records. Interoperability is achieved through the utilization of the EBUCore metadata model, and the alignment of the providers' records to their requirements. EBU MINT is being used for the alignment of arbitrary data structures to the EBUCore model, and in that way establish and maintain interoperability among aggregators.

14.15 **CCDM & RDF**, *Jean-Pierre Evain, EBU*

The session on the Class Conceptual Data Model (CCDM) will consist of an introduction to the model and associated ontology. This will be followed by an explanation how to extend the model using the excel sheet or directly in RDF based on an example or at the request of participants to solve specific issues.

15.00 **Coffee**

15.30 **Natural language processing for mining textual data: An Introduction to the Apache OpenNLP based tools and applications**, *Maurizio Montagnuolo, RAI*

This presentation describes the Apache OpenNLP library for extracting meaningful information from textual or textualized data streams. The library supports most common natural language processing task, such as sentence detection, tokenization, POS (Part-of-Speech) tagging and named entities detection. Several models are available to suit different languages. Also, training tools are provided to users for building their own language models, thus making this library extensible and open to many sort of needs. To demonstrate the usefulness of these tools, a use case application for topic indexing, retrieval, contextualization and browsing of multimodal news will be presented.

16.15 **Wrap-up and close of meeting**