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AES60id-2020
(Rev. AES60-2011)

AES Information Document for audio metadata— Core audio metadata

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551 Fifth Avenue, New York, New York 10176, US.

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Abstract
This specification addresses the creation, management and preservation of material that can be re-used as originally produced, or may provide input material for new production projects. Material is expected to be exchanged between various organisations or between production facilities in a distributed environment.

The core set of metadata presented in this specification is a co-publication of EBU Tech3293-2019 EBUCore, itself an extension to and a refinement of the Dublin Core. EBUCore is a minimum list of attributes characterizing video and / or audio media resources. An XML representation is used as this is the likely method that metadata would be implemented, for example in archive exchange projects using the Open Archive Initiative's Protocol for Metadata Harvesting (OAI-PMH).

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www.aes.org/standards standards@aes.org

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Foreword to AES60-2011

This foreword is not part of the AES60-2011 *AES standard for audio metadata - Core audio metadata*.

This document has its roots in the AES project X098A where the concept of providing a core administrative metadata set for audio exchange explored. This metadata set was based on Dublin Core and expanded to meet the basic requirements of the audio industry. It was well ahead of its time and as a result did not attract sufficient industry traction to complete until comparatively recently where similar work covering both audio and video was carried out within the EBU. The decision was eventually taken to base the AES core descriptive metadata on the EBU core and co-publish this under the auspices of EBU and AES, which is expected to have a greater impact on the industry as a whole.

The members of the writing group that developed this document in draft include: J. Akatsuka, P. Alyea, S. Aoki, D. Ackerman, G. Dahl, J-P. Evain, L. Gaustad, B. Gordon, K. Hamasaki, U. Henry, E. Jacobs, L. Jonsson, K. Kitamura, C. Lacinak, A. Mason, D. Nolan, J. Sam, T. Sheldon, W. Sistrunk, K. Tanaka, P. Treleaven, T. Værvågen, C. van Winkle, M. Yonge, J. Yoshio.

Chris Chambers
Chair, working group SC-03-07

Foreword to AES60id-2020

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Tormod Værvågen
Chair, working group SC-07-01

Note on normative language

In AES standards documents, sentences containing the word “shall” are requirements for compliance with the document. Sentences containing the verb “should” are strong suggestions (recommendations). Sentences giving permission use the verb “may”. Sentences expressing a possibility use the verb “can”.

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AES Information document for audio metadata - Core audio metadata

Introduction

The core set of metadata presented in this specification is a co-publication of EBU Tech3293 v. 1.9 EBUCore Metadata Set.

EBUCore has been designed over the last ten years to describe audio, video and other resources for a wide range of broadcasting applications including archives, exchange and production in the context of a Service-Oriented Architecture. EBUCore is based on the Dublin Core to maximise interoperability with the community of Dublin Core users such as the European Digital Library 'Europeana'.

EBUCore 1.9 have several serialisations, and this issue uses the XML-schema serialisation, well suited for use in the AXML chunk of BWF. It takes into account the latest developments in the Semantic Web and Linked Open Data communities. A link to EBUCore RDF ontology and its documentation is provided in Annex E. The EBUCore RDF ontology has been updated to match EBU's CCDM (Tech 3351) needs and improve mapping with other ontologies. EBUCore RDF is listed as Linked Open Vocabulary as well as RDF-Vocab for Ruby developers.

This document has one of its roots in the AES project X098A where the concept of providing a core administrative metadata set for audio exchange explored. This metadata set was based on Dublin Core and expanded to meet the basic requirements of the audio industry. At the same time, there was similar work covering both audio and video was carried out within the EBU. The decision was eventually to base the AES core descriptive metadata on the EBUCore and co-publish this under the auspices of EBU and AES, which was expected to have a greater impact on the industry as a whole.

EBUCore 1.9 provides a solution for dynamic acquisition metadata, a unique representation of the ITU BS2076 Audio Data Model (ADM). Now 'props', 'costumes', 'timed text, "actions and "emotions' (among others) can be associated to scenes, persons or character. High Dynamic Range static technical metadata and Virtual Reality flags have been added to the videoFormat element.

This document replaces AES60, and ensures total compatibility between AES and EBU specifications. It provides links to the EBUCore schema and its HTML documentation. It also provides guidelines on how to use EBUCore to implement a variety of features.

More information on EBU metadata activities is provided on the EBU TECHNICAL website (http://tech.ebu.ch/metadata).

Modern IT-based production environments need metadata to identify and retrieve content correctly and efficiently. Metadata provides an essential link between various production operations and the following core set of information is a minimum requirement for practical operations. Content archives provide a common basis to describe content in a way that supports other processes in the production chain.

The decision to issue AES Core as a co-publication with the EBUCore is seen as an important factor in maintaining interoperability between the audio and video industries. For this reason, this specification includes elements that may seldom be used in a purely audio context. However, much audio material is destined to coexist with video and other media at some point during its life, so these additional elements may not be superfluous. It is not expected that the AES will actively develop the non-audio aspects of this standard but instead rely on active cooperation with EBU to co-maintain the AES and EBU cores.

This “AES Core” metadata set is primarily a minimum list of elements and attributes for which an XML representation is also proposed. Being based on the EBUCore, it follows that it is also an extension to the Dublin

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Core metadata set. The Dublin Core is being used as a core metadata set by librarians and in cultural heritage projects. The AES Core and EBUCore, used for radio and television archives, offer a bridge between cultural-heritage databases, broadcasting production systems and broadcasting archive repositories.

0 Preamble

0.1 Documentation conventions

A mono-spaced typeface is used to identify computer code expressions to distinguish them from regular text. Examples are shown using XML structural conventions.

1 Scope

The core set of metadata presented in this specification is based on the EBUCore, itself an extension to the Dublin Core. It is a minimum list of attributes characterizing audio and / or video media resources. The set of metadata defined in this specification has been identified as being the minimum information needed to describe radio and television content.

An XML representation is used as this is the likely method that metadata would be implemented, for example in archive exchange projects using the Open Archive Initiative's Protocol for Metadata Harvesting (OAI-PMH).

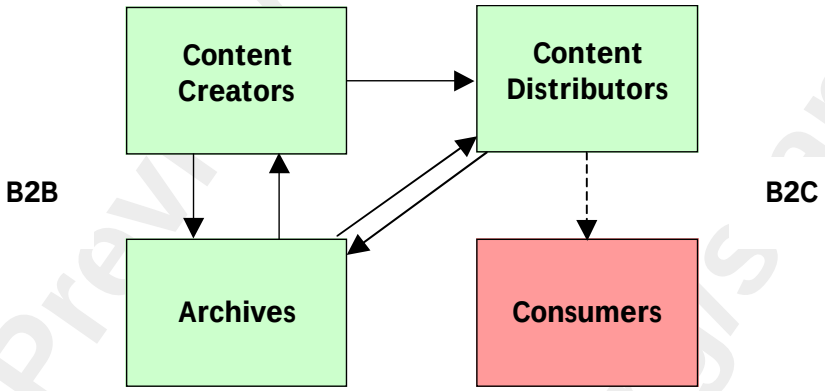

Figure 1: Archiving - a core process to define metadata

"If you can't find it, you don't have it!" This should not happen in modern IT-based production environments. Metadata is the glue between production operations in particular moving towards Service Oriented Architecture and file-based production. Documenting audiovisual resources with EBUCore information is a minimum requirement corresponding to fundamental investment with guaranteed return.

This specification addresses the creation, management and preservation of audiovisual material. EBUCore facilitates program exchanges between broadcasters or between production facilities in distributed and cloud environments. Beyond production, EBUCore can be used to describe content for distribution (broadcast, broadband Internet, mobile or hybrid delivery). EBUCore is also the default set of technical and descriptive metadata used by FIMS, the Framework of Interoperable Media Services (http://fims.tv).

The core set of metadata presented in EBUCore is the Dublin Core for media. The Dublin Core is being used as a core metadata set by librarians and museums in cultural heritage projects. The EBUCore is recommended when describing and providing access to audiovisual content and is not limited to archives.

EBUCore takes into account latest developments in the Semantic Web and Linked Open Data communities. EBUCore is available as an RDF ontology entirely compatible with the W3C Media Annotation Working Group ontology, which model is common and based on the EBU Class Conceptual Data Model (Tech.3351). A RDF representation of the EBUCore schema is referenced in Annex E.

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