



entertainment merchants association

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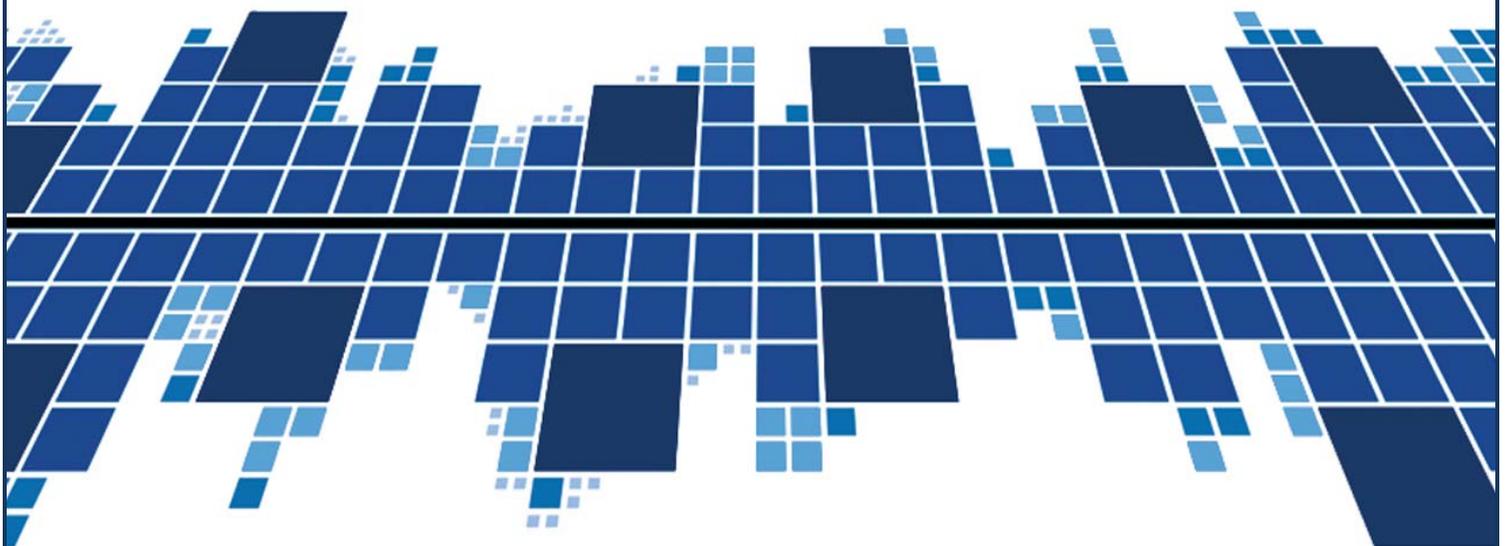
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Best Practices & Standards For the Delivery of Metadata for Digital Audio-Visual Distribution

January 7, 2014





MEDIA ENTERTAINMENT CORE METADATA

EMA, with the support of MovieLabs, initially created the EMA Metadata structure. This structure robustly described structure and data fields to communicate descriptive, logical, and technical metadata from content providers to retailers/distributors and ultimately to consumers. EMA Metadata, along with work done by DECE in developing UltraViolet's metadata needs, is the basis for the all-inclusive "Common Metadata" as published by MovieLabs.

After further refinement, and more recent collaboration with the DEG Media and Content Operations Committee, the attached DEG-EMA Media Entertainment Core Metadata (MEC Metadata) was created. The MEC Metadata describes those fields that are most critical to the retailer's ability to merchandise and distribute media assets. It is pared down from "Common Metadata" in order to ease marketplace adoption. However, individual adopters can elect to share additional metadata fields from "Common Metadata" as appropriate and as agreed.

Why is the Media Entertainment Core Metadata needed?

- Metadata related to digital video distribution is too often communicated manually between trading partners.
- It is also communicated in a variety of inconsistent structures and formats that are requested by retailers/distributors or as supplied by various content providers.
- Bad metadata that is translated to supplier catalogs or retailer/distributor websites can cause lost sales.
- Late metadata can bottleneck the supply chain, delaying product availability.

A governance structure, including EMA, DEG, UltraViolet, EIDR, and MovieLabs is being developed.

Metadata Working Group

Participants in the Metadata Working Group were:

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Dish – Timothy Loveridge

Google – Bill Kotzman, Doug Stallard

Microsoft – Andy Rosen

Netflix – Steven Kang , Nick Levin, Chris Fetner

Redbox Instant – Joe Ambeault

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Sony – David Diguardi, Michael McLaurin, Mike Buller

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(Names and employers of Working Group Participants are for information only and do not signify endorsement.)

Media Entertainment Core Metadata

'mdmec' namespace

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NOTE: No effort is being made by EMA, the EMA Digital Council or Motion Picture Laboratories to in any way obligate any market participant to adhere to the Common Metadata or EMA Metadata. Whether to adopt the Common Metadata and/or EMA Metadata in whole or in part is left entirely to the individual discretion of individual market participants, using their own independent business judgment. Moreover, EMA, the EMA and Motion Picture Laboratories each disclaim any warranty or representation as to the suitability of the Common Metadata and/or EMA Metadata for any purpose, and any liability for any damages or other harm you may incur as a result of subscribing to this Metadata.

REVISION HISTORY

Version	Date	Description
1.0	January 5, 2010	EMA Metadata
1.2	November 1, 2011	EMA Metadata with EMA Core definition
2.0	January 3, 2013	DEG-EMA Media Entertainment Core Metadata.
<u>2.1</u>	<u>TBD</u>	<u>Updated to correspond with Common Metadata 2.1</u>

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1 INTRODUCTION

The Entertainment Merchant's Association (EMA) and the Digital Entertainment Group (DEG) have defined metadata for the description of information delivered from Publishers to Retailers. This document was developed by the EMA Digital Council and the DEG Media and Content Operations Committee with the objective of standardizing the metadata communication from content providers to digital retailers.

This document defines Media Entertainment Core Metadata v2.10. This is also referred to as MEC Metadata, or MEC.

MEC Metadata builds upon EMA Metadata and Common Metadata developed by Motion Picture Laboratories (MovieLabs), EMA, DEG and others. Common Metadata includes elements that cover typical definitions of media, particularly movies and television. Common Metadata has two parts: Basic Metadata and Digital Asset Metadata. Basic Metadata includes descriptions such as title and artists. It describes information about the work independent of encoding. Digital Asset metadata describes information about individual encoded audio, video and subtitle streams, and other media included. Package and File Metadata describes a single possible packaging scenario and ties in other metadata types. Ratings and Parental Control information is described.

Common Metadata is designed to provide definitions to be inserted into other metadata systems, such as was done here, EIDR metadata and UltraViolet metadata. Selected elements of the Common Metadata are used in derived specifications. Adopters then define additional metadata to cover areas not included in Common Metadata.

1.1 Document Organization

This document is organized as follows:

1. Introduction—Background, scope and conventions
2. Core Metadata –Definition of MEC Metadata.

1.2 Document Notation and Conventions

The document uses the conventions of Common Metadata [CM].

1.3 Normative References

[CM] TR-META-CM MovieLabs Common Metadata, v2.10, <http://www.movelabs.com/md/md>
[EIDR-TO] *EIDR Technical Overview*, November 2010. <http://eidr.org/technology/#docs>
All Common Metadata references are included by reference.

1.4 Informative References

[DECEMD] DECE Content Metadata. <http://www.uvvu.com/techspec-archive.php>

1.5 XML Namespaces

This document defines:

- mdmec: includes Media Entertainment Core Metadata-specific data
'mdmec' builds on
- md: Common Metadata corresponding with Common Metadata [CM]

1.6 Identifiers

Identifiers must be universally unique. Recommended identifier schemes may be found in Common Metadata [CM] and in DECE Content Metadata [DECEMD].

The use of Entertainment Identifier Registry identifiers (www.eidr.org) is strongly encouraged. Please see [EIDR-TO].

1.7 Status

This specification is completed and ready for implementation. Although tested, we anticipate that additional implementation experience will yield recommendation for changes. Implementers should anticipate one or more revisions. Reasonable measures will be taken to ensure changes are backwards compatible. See Backwards Compatibility Best Practices in [CM]

2 MEC CORE METADATA

The section defines the MEC Metadata. The rules for what must be included and how it is encoded is in this section and its references.

Note that the structure accommodates additional data which may be included optionally.

[The CoreMetadata element is defined to include MEC data.](#)

2.1 CoreMetadata-type

This defines the MEC metadata, including both the descriptive information (Basic Metadata) and the encoding information (Physical metadata). It is as follows:

Element	Attribute	Definition	Value	Card.
CoreMetadata-type				
Basic		Basic Metadata	md:BasicMetadata-type	
DigitalAsset		Digital Asset Metadata: encoding information for the assets	md:DigitalAssetMetadata-type	1..n
TitleInternalAlias		Title used by involved parties to refer to this content	xs:string	0..1
Source		Organization that created the metadata	mdmec:Publisher-type	0..1
CompanyDisplayCredit		Organizations associated with the asset, for display purposes.	md:CompanyCredits-type	0..n
GroupingEntity		The "Network" or "Studio" that the product should be merchandised under within a retailer's website. For example, "Warner Bros".	md:GroupingEntity-type	0..n

2.1.1 Publisher-type

Element	Attribute	Definition	Value	Card.
Publisher-type			md:OrgName-type (by extension)	

	organizationID	Organization Identifier for the publisher. This is an ID use by the Publisher to refer to itself.		0..1
	retailerSpecificID	Identifier by which the Retailer knows the Publisher	xs:string	0..1
DisplayName		Name of Publisher in a displayable form. This is the name intended to be presented to a consumer.	xs:string	
SortName		Name of Publisher intended for sorting purposes. It is not necessary to include SortName if it is identical to DisplayName.		0..1
ContactInfo		Contact information for the publisher	md:ContactInfo-type	

SortName is typically used when a Publisher has variations on its name that may not sort properly (e.g., some instances have a prefix).

2.2 Common Metadata derived types

Common Metadata [CM09] includes elements that cover typical definitions of media, particularly movies and television. Basic Metadata includes descriptions such as title and artists. It describes information about the work independent of encoding. Digital Asset metadata describes information about individual encoded audio, video and subtitle streams, and other media included. Package and File Metadata describes one possible packaging scenario and ties in other metadata types. Ratings and Parental Control information is described.

Common Metadata is designed to provide definitions to be inserted into other metadata systems, such as EMA's. Although EMA uses some element from Common Metadata, it also defines additional metadata to cover areas specific to EMA's requirements.

The following MEC types are derived directly from Common Metadata:

MEC Type	Common Metadata Type
mdmec:BasicMetadata-type	md:BasicMetadata-type
mdmec:DigitalAssetMetadata-type	md:DigitalAssetMetadata-type

All mandatory elements and attributes must be included. Any optional elements may be included. The following elements and attributes are required for MEC usage, regardless of whether they are optional, except as noted.

The following table uses the following conventions:

- Structure is given by table indentation. Parent level elements to the left.

- Attributes begin with '@'. For example, @ContentID refers to the ContentID attribute

2.2.1 Basic Metadata Usage

Element or Attribute		Usage Rules
BasicMetadata-type		Required
	@ContentID	Required
	UpdateNum	Shall be included if the record is an update (i.e., not the first record distributed)
	LocalizedInfo	At least one instance required
	@language	Required
	default	must be included for one instance of LocalizedInfo for the language of original production
	TitleDisplay60	Required. Note that TitleDisplay19 no longer required.
	TitleSort	Required
	OriginalTitle	Required
	Summary190	Description that is unique to that content
	Summary400	Recommended
	Cast	if applicable
	Genre	Exactly one primary genre shall be included. It will be from http://www.movielifes.com/md/mec/mec_primary_genre.html @source='http://www.movielifes.com/md/mec/mec_primary_genre.html'. @level='0'. Any additional genres may be included.
	ArtReference	At least one instance is mandatory, additional instances are optional
	CopyrightLine	Required
	AlternateTitle	Required
	RunLength	Specify to at least seconds. Zero is recommended for season and series.
	ReleaseYear	Required

	ReleaseDate	should include the highest date/time resolution available
	ReleaseHistory ReleaseType	Original Release date must be included with ReleaseType='original'. When applicable Local Release date must be included with ReleaseType='local'. When applicable DVD Release date must be included with ReleaseType='DVD'
	WorkType	Required
	PictureColorType	optional, but it should be included
	PictureFormat	optional, but it should be included
	AltIdentifier	optional, but it should be included for all commonly used identifiers. For example, if ISAN is available, it should be included.
	RatingSet	SHALL be included for all available ratings in the regions where Retailers are authorized to sell this content. All elements and attributes should be included if applicable to the rating. The condition attribute should be used if the primary purpose of the edit is a derivation from a parent for the purposes of ratings change (e.g., airline edit or 'unrated edition').
	People	Include Actor(s), Director(s) and Producer(s) as applicable.
	CountryOfOrigin	defined as the "generally accepted country of reference".
	PrimarySpokenLanguage	Language should be included for the language(s) in which the video was shot (i.e., the language the "lips move to.") Movies such as Babel may have multiple PrimarySpokenLanguage elements. This should not be used for languages spoken incidentally and subtitled; for example, "RU" (Russian) in <i>The Hunt for Red October</i> .
	SequenceInfo Parent	SHALL be included for the following work types: Season, Episode, Promotion, Excerpt, Supplemental
	Number	Required
	HouseID	Shall be used for production ID in episodic content
	Parent	Shall be included for work type of Non-episodic Show if that show is part of a season or series. Should be included for derived works such as Director's Cut and promotional activity.

2.2.2 Digital Asset Metadata Usage

Element or Attribute		Usage Rules
DigitalAssetMetadata-type		Shall be included for each track included
	Audio	Required
	Type	Required
	Encoding	Required
	Codec	Required
	CodecType	The IANA namespace shall be used
	BitrateMax	Required
	SampleRate	Required
	SampleBitDepth	Required
	Language	Required
	Channels	Required
	Video	Required
	Type	Required
	Encoding	Required
	Codec	Required
	CodecType	The IANA namespace SHALL be used
	BitrateMax	Required
	Picture	Required
	AspectRatio	Required
	ColorType	Required
	SubtitleLanguage	Shall be included if the video contains visible subtitles.
	Subtitle	If applicable

		Format	Required
		Type	Required
		FormatType	Required
		Language	Required

2.2.3 Additional Usage Rules

- Original Release/Air Date (Year for features; Date for episodic television) – should be defined as the original release date in the target region of distribution.
- StartsWith search titles are included in TitleAlternate with type 'StartsWith'.
- ReleaseHistory should apply to distribution target.

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