

# Common Metadata 2.7 Update Notes

Final: November 1, 2018

**These notes were used during the creation of Version 2.7. It is neither authoritative nor complete, but we believe it can be useful in understanding the motivation behind some of the changes.**

**The specification and schema supersede anything said here.**

**[www.movie labs.com/md/md](http://www.movie labs.com/md/md)**

# Summary of key changes

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- Basic
  - 'Production' ReleaseType
  - CountryOfOrigin: allow multiple (0..n), clarified definition
  - People
    - Added People/Job/CharacterInfo for localization, IDs and nonfictional
    - Gender encoding improvements
    - Top-Billed
  - Parent (esp. for regional episode ordering)
  - "ContentRelatedTo"
    - Includes 'based on x', and Universe, Brand and Franchise
  - New WorkType enumerations
- Digital Asset Metadata
  - 'noforced' subtitle Type
  - Compliance (e.g., Photosensitive Epilepsy testing status)
  - Add Dynamic Metadata (e.g., Dolby Vision, SL-HDR1, HDR10+)
  - Define default video caption as 'open'
  - Video: BitDepth and CodecProfile

# 'Production' ReleaseType

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- Problem
  - No way to express Production year or date (could be different from ReleaseDate)
- Solution
  - Add 'Production' ReleaseType
  - Date can be found in ReleaseHistory/Date when ReleaseHistory/ReleaseType="Production"

# CountryOfOrigin 0..n

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- Problem
  - Can be more than one Country of Origin
- Examples
  - Ireland and Canada
    - <https://www.fr.universcine.be/films/maudie>
  - Canada, Sweden and UK:
    - <https://www.fr.universcine.be/films/the-killer-inside-me>
- Solution
  - Change cardinality of CountryOfOrigin to 0..n
- Also, clarified definition

# 'Character' not localized; no character IDs

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- Problem
  - Cannot localize People/Job/Character
    - For example “Chewbacca” in Korean “츄바카”
  - Characters cannot be assigned IDs
  - No way to know if character is nonfictional
- Solution
  - Add CharacterInfo object to include localization (including original) and optional IDs
  - Add NonFictional (boolean) and @context (string)
    - @context is currently undefined, but can include information like “cameo” or “combination” (combination of multiple people)
  - Note that this is redundant with Job/Character element
  - Why not put in LocalizedInfo?
    - LocalizedInfo/PeopleLocal use for dubbing actors
    - No linkage between LocalizedInfo/PeopleLocal and Basic/People.
    - Actors would be handled differently than other cast and crew.
    - Doesn't solve ID problem.

# Top-Billed

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- Problem
  - No way to know which talent is “top billed”
  - Information needed to show top-billed talent (retailers sometimes pick arbitrarily)
- Solution
  - Add @topBilled xs:boolean to BillingBlockOrder

# Gender (scope)

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- "Gender" element is intended to encode gender identity. That is, how a person publicly identifies, not necessarily how some in society might view them
  - Sexual orientation is not included/encoded
  - Gender expression (e.g., gender-specific clothing choice, hair, makeup, etc.) is not included/encoded
  - Sexual reassignment status is not included/encoded

# Gender

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- Problem
  - Gender object does not represent diversity of genders
  - Terms:
    - 'Other' is missing
    - 'Plural' isn't a good category
  - No gender in Character
- Solution
  - Define new Gender-type
    - Add @transgender xs:boolean
    - Add @specificGender for more specific self-identified gender
    - Remove enumeration in type definition, assign to xs:string-Gender
    - Deprecate 'plural' gender
  - Define People/Gender as md:Gender-type
  - Add Character/Gender of md:Gender-type



# Parent Sequence

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- Problem
  - Can't have different parents for different regions.
  - Can't have different ordering (especially episodes) for different parents/regions
- Solution
  - Add SequenceInfo to Basic/Parent object
    - This allows different sequencing for different parents
    - Note that this is not backwards compatible with Basic/SequenceInfo (now expressed in two locations). When there's only one Parent/Sequence, both Basic/SequenceInfo and Basic/Parent/SequenceInfo should be populated
  - Add Region and ExcludedRegion to Parent
    - This mirrors MMC and has the same functionality
  - Note that MMC and MEC now have the same structure
    - ExperienceChild + SequenceInfo in MMC
    - Parent + SequenceInfo in MEC

# Universe, Brand and Franchise

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- Problem
  - No way to express
    - “**Universe**” e.g., MCU, Star Trek, Fantastic 4, X-Men, DCEU, Arrowverse, Middle Earth
    - “**Brand**” e.g., Marvel, Universal, Pixar, Disney, Lego, ABC, "Marvel Netflix"
    - “**Franchise**”, Wolverine, Wonder Woman, Thor, Captain America, Deadpool, Star Trek TOS, Star Trek TNG, Star Wars Original Trilogy, Star Wars, Prequel Trilogy, Star Wars Legends, Superman, Batman Nolan, Godfather, Ant-Man, Bond Moore, Bond Craig, Bond Brosnan, Minions, Cars, LOTR, Avenger
- Solution
  - Add GroupingEntity with Type = “Universe”, “Brand” or “Franchise”
  - Will need best practices

# Related To

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- Issue
  - Content is often based on another work (e.g., a book series)
  - No way to express
    - “**Universe**” e.g., MCU, Star Trek, Fantastic 4, X-Men, DCEU, Arrowverse, Middle Earth
    - “**Brand**” e.g., Marvel, Universal, Pixar, Disney, Lego, ABC, "Marvel Netflix"
    - “**Franchise**”, Wolverine, Wonder Woman, Thor, Captain America, Deadpool, Star Trek TOS, Star Trek TNG, Star Wars Original Trilogy, Star Wars, Prequel Trilogy, Star Wars Legends, Superman, Batman Nolan, Godfather, Ant-Man, Bond Moore, Bond Craig, Bond Brosnan, Minions, Cars, LOTR, Avenger

# Related To

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- Relations
  - Work: Content can be *based-on* a work (e.g., a book series)
  - Places: *is-about-place*, *performed/filmed-at*, *take-place-at*
  - People: *is-about* (primarily, also)
  - Periods or events: *is-about-event*, *takes-place-during*
- Objects can be real, fictional or fictionalized
- Degree to which content relates something can range from loose (e.g., fictionalized) to strong (accurate)
  - Modifications can include combining characters, inventing dialog, etc.

# Based on structure

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- Initial
  - Relationship
  - Work – reference to a work (anything in WorkType)
    - See new WorkType enumerations
  - Description – consumer facing description (localized)
  - GroupingEntity – covers franchise, universe and brand (same used to group for retail)
- Future
  - People
  - Place
  - Period
  - Event

# WorkType enumerations

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- Problem
  - Some material needs to be described for functions such as bonus/interactivity or a relationship (e.g., based on this book)
  - No WorkType enumerations for 'cards'
  - Current WorkType don't cover these areas
- Approach
  - Add WorkType values that are general enough to cover broad areas.
  - Use WorkTypeDetail to provide additional information when necessary
  - WorkTypeDetail change from 0..1 to 0..n
- New Values
  - Volume – Subset of a single season with sequential episodes
  - Written Work – novels, comic strips, graphic novels, etc.
  - Visual Art – painting, sculpture, photograph
  - Performance Art – Play, musical, opera, ballet. Music is covered elsewhere
  - Amusement – Games (video, board), toys, amusement park rides
  - For cards: Allow any term in the CardSet/Card Type (ref: 5.2.11.2): AntiPiracy, DistributionLogo, DubbingCredit, Intermission, EditNotice, *Heath (new)* and Other.

# 'noforced'

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- Problem
  - Some video comes with open forced subtitles
  - Need to flag subtitle tracks without forced subtitles (i.e., gaps where forced subtitles would be)
- Solution
  - Add 'noforced' as subtitle Type
    - Used in conjunction with other Type values such as 'normal' or 'SDH'
    - Can't be used with 'forced'

# Compliance

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- Problem
  - Need to specify whether track complies with various standards
- Solution
  - Add “Compliance” to every track type
    - Category – what is the category (e.g., “PSE” for photosensitive epilepsy)
    - Standard – against which compliance is determined
    - Disposition – pass/fail/pending/other
    - CompetentAuthority – Who issues certification
    - Certificate – ‘Image’ of cert (e.g., PDF in xs:base64Binary)
    - TestingOrganization – either self-test or 3<sup>rd</sup> party
    - TestingMethod
    - Comments



# Added Dynamic Metadata

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- Problem
  - Need way to specify dynamic metadata (e.g., Dolby Vision, SL-HDR1/2/3, and HDR10+)
- Solution
  - Add ColorTransformMetadata based on SMPTE 2094
  - Contains
    - ColorVolumeTransform (“DolbyVision”, “SL-HDR”, and “HDR10PLUS”)
    - ApplicationIdentifier and @applicationVersion (from SMPTE 2094)
    - TargetSystemDisplay, also from SMPTE 2094. Same data as MasteredColorVolume (SMTPE 2086), although with slightly different ranges

# Define default video caption as 'open'

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- Problem
  - There is no default for Video/SubtitleLanguage/@closed
  - In file-based closed caption delivery is rare if not nonexistent
- Solution
  - Define default as “false” (i.e., default is open captions).

# Video: BitDepth and CodecProfile

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- Problem
  - Only way to specify color/luminance bit depth is via MPEG Profile
    - Often easier to just specify it directly
    - Some profiles could support multiple bit depths
  - No way to specify profiles for non-MPEG codecs
    - e.g., IMX 50, DNxHD 440x
- Solution
  - Added Picture/BitDepth and @alphaDepth
  - Added CodecProfile