

Media Manifest Core (MMC)

February 6, 2018

- In 2015, several retailers articulated a need for **best practices and examples** that clearly explained how to use Media Manifest with most common delivery use cases
- Media Manifest Deliver Core, v1.0 (January, 2016)
 - Focused on Movies
- Works in conjunction with Media Entertainment Core (MEC) metadata and EMA Avails
- In production use by some retailers (and some non-retailers)

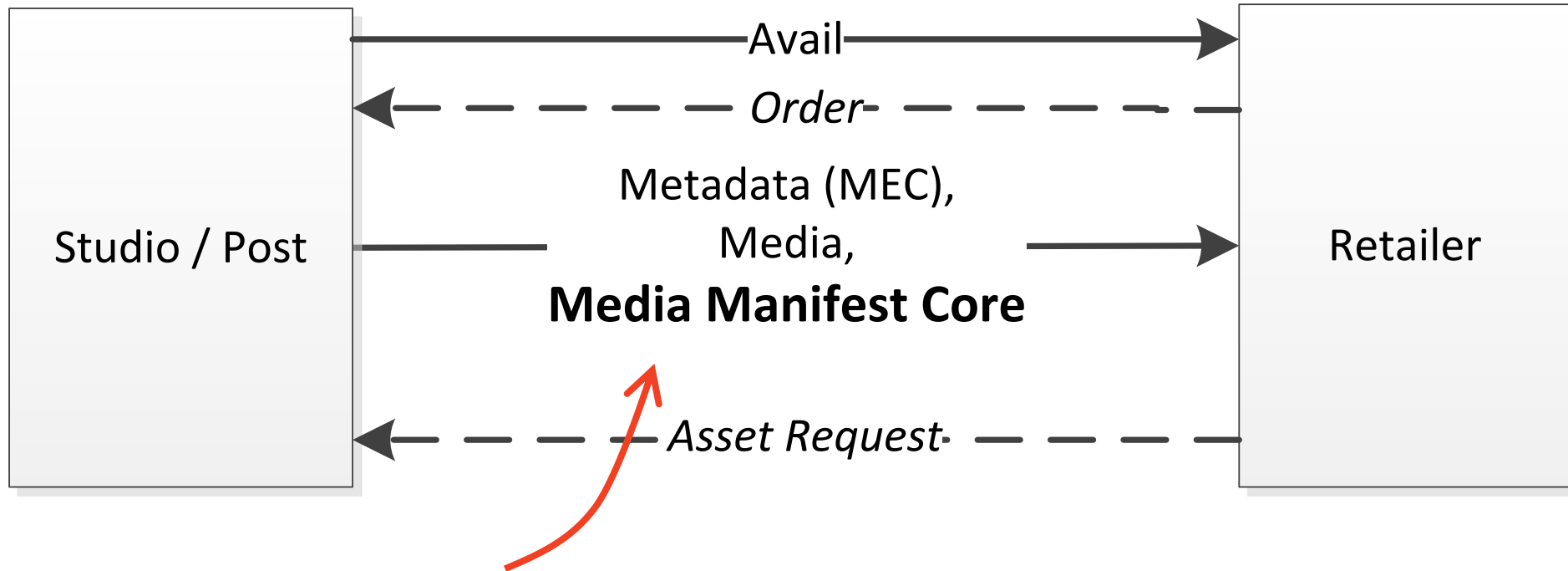
What

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- Compliant subset of Media Manifest
- Detailed instructions and examples given for following use cases:
 - Simple movie with trailer
 - Multi-language
 - Forced Subtitles
 - Multiple trailers
 - Dub cards
 - Pre-roll
 - Pre-order
- Use only what you need
- More advanced usage defined at www.movie labs.com/md/practices

Where

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Benefits

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- Solves numerous packaging problems, including internationalization
 - Which trailers go with which features
 - Region and language-specific features and trailers
 - Permutations and combinations of language tracks (audio and subtitle)
 - Pre-sale and Post-sale experiences
- Supports Movies and TV
- Supports both conventional and “component-based” delivery
- Compatible with to EMA Avails
- Proven by major retailers
- Future-proof (bonus material, etc.)

MMC for TV

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- Original work addressed TV, but did not include detailed practices and examples
 - Goal is to add those now
- Details were worked out with one retailer, but not published
 - That work and their experience is worked into this proposal

MMC for TV

Essential design principles/decisions

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- Episode structure is same as movies
 - Encoding rules are the same as movie use cases:
 - Simple ~~movie~~ episode with trailer; Multi-language; Forced Subtitles; Multiple trailers; Dub cards; Pre-roll; Pre-order
- Series, Season and episode objects are delivered as separate manifests
 - This requires more files (not more data) to be delivered, but simplifies workflows.
- Bonus not addressed in MMC
 - This proposal contains TV bonus, but not movie bonus
 - Constructs are identical, but I'm hoping movies migrate to CPE

Use Cases

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- Case 1: No Season/Series bonus
 - Case 1a: Complete Season
 - Case 1b: Active Season
- Case 2: With Season/Series Bonus or alternate episode ordering
 - Case 2a: Complete Season
 - Case 2b: Active Season

Summary

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- Episodes are sent standalone, just like a movie
- Episode bonus material is included in the episode manifest
- Case 1: No Season/Series Bonus
 - Case 1a: Completed Season
 - Deliver Series Manifest once, reference seasons
 - Deliver Season Manifest for each season. Reference Episodes
 - Deliver each episode
 - Case 1b: Active Season
 - Deliver Series Manifest prior to each season, reference seasons
 - Deliver Season Manifest prior to each season, no reference to episodes
 - Deliver each episode
- Case 2: Season/Series Bonus
 - When delivering Series Manifest, include bonus
 - When delivering Season Manifest, including bonus

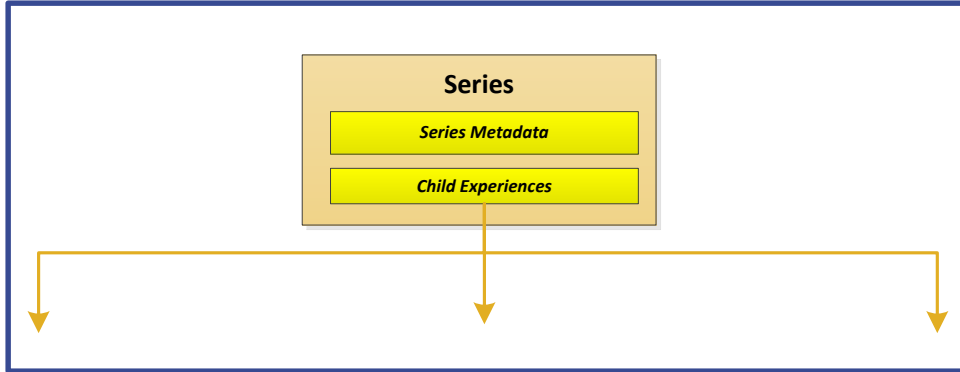
No-Bonus Experience Structure (for examples)

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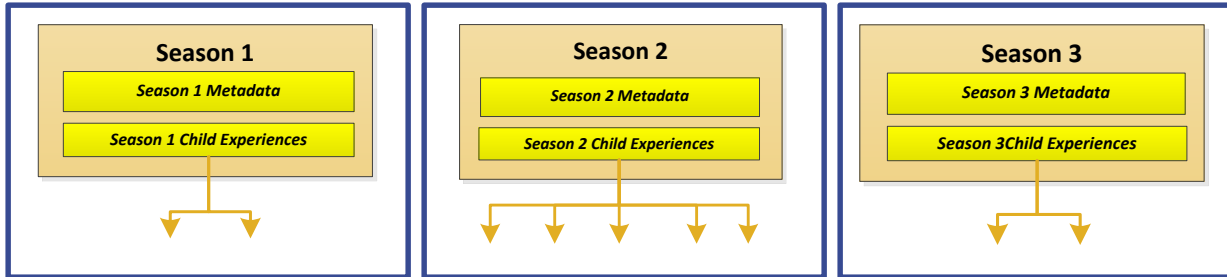
Season reordering, & Sequence

1a: Complete Season



Series:

- Delivered once
- References all existing Seasons via ExperienceID



Seasons:

- Delivered individually
- References episodes via ExperienceID



Episodes:

- Delivered individually

 = Manifest delivery

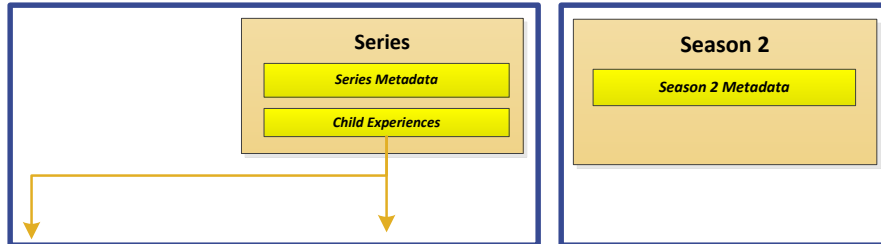
Case 1b: No bonus, Active Season

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- Deliver Season 3
- Precondition: Seasons 1 already delivered



Season and Series



Series updated (redelivered) to reference new season
Season delivered

- No episode references

Episodes delivered as they become available

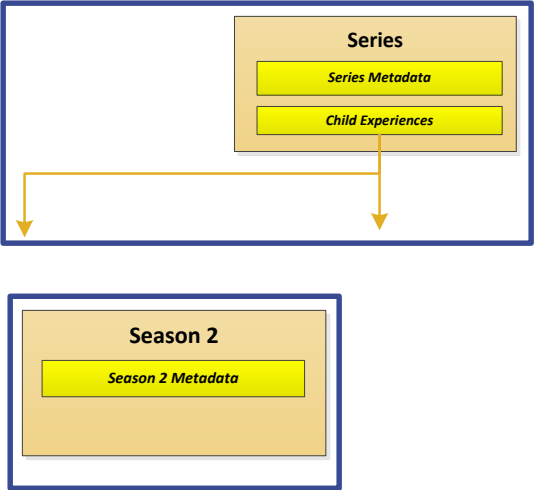


Episodes:

- Identical structure to Case 1a

 = Manifest delivery

Season 4 (1-3 already delivered)



- Episodes:
- Identical structure to Case 1a

 = Manifest delivery

Episode with bonus

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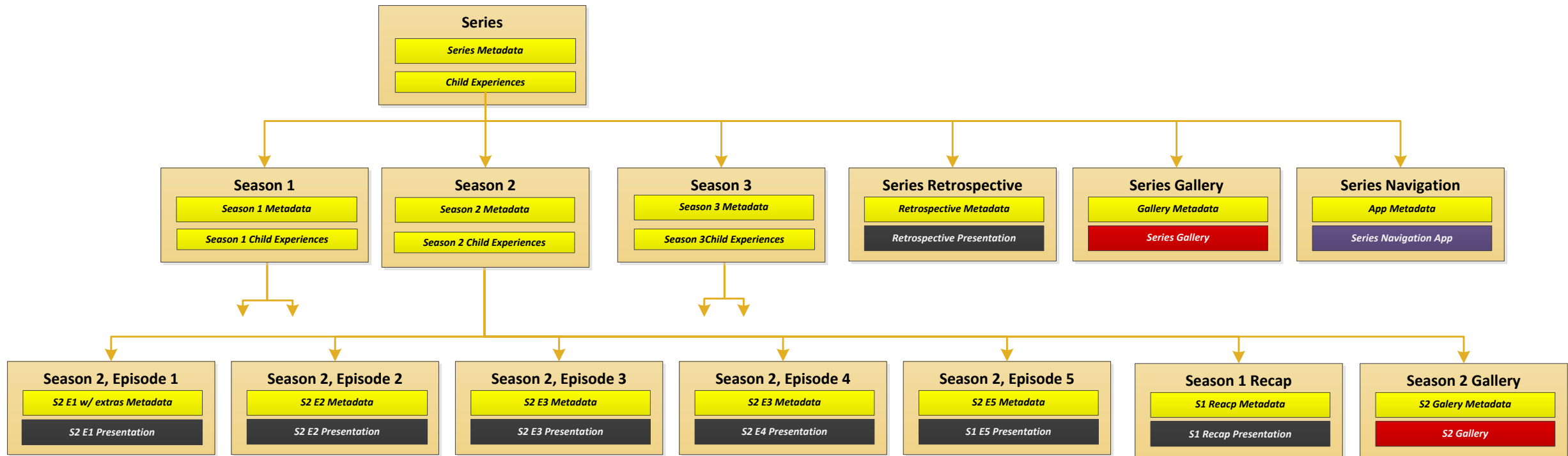
- Just like movie with bonus
- Delivered as a single Manifest



= Manifest delivery

Season/Series Bonus Structure (for examples)

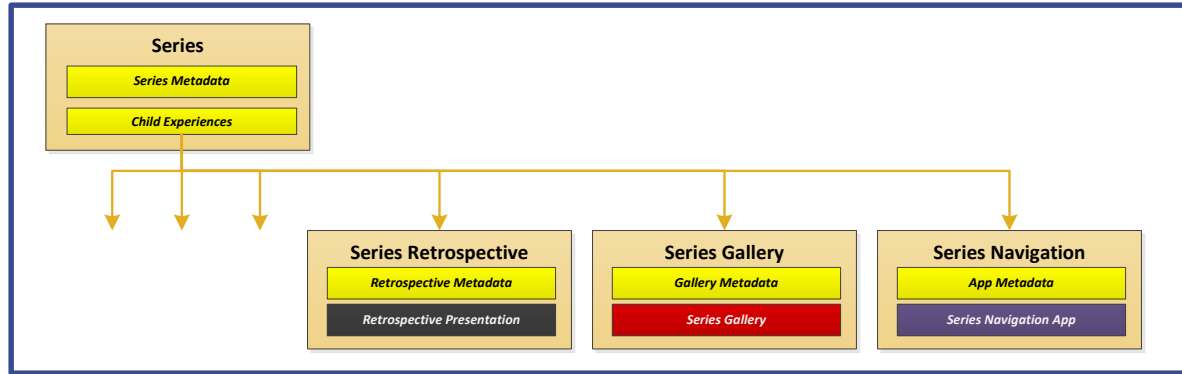
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2a: Complete Season with Bonus

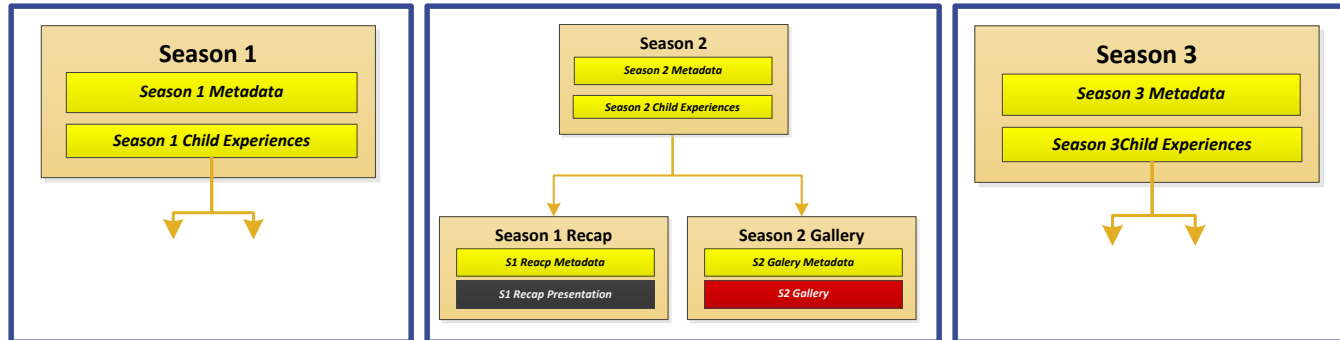
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- Delivery units same as 2a, but include bonus



Series:

- Delivered once
- References all existing Seasons via ExperienceID
- Series bonus included in Series Manifest



Seasons:

- Delivered individually
- References episodes via ExperienceID
- Season bonus included in Season Manifest

 = Manifest delivery

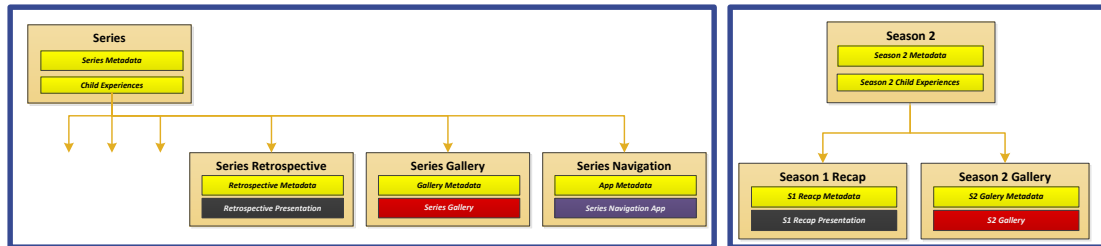
Case 2b: Bonus, Active Season

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- Deliver Season 2
- Precondition: Season 1 already delivered



Season and Series



Series updated (redelivered) to reference new season
Season delivered

- No episode references
- Bonus material included

Episodes delivered as they become available



Episodes:

- Identical structure to Case 1a

 = Manifest delivery