Avails

October 4, 2016

Topics

- IDs (AltID, ALID, etc.)
- Avails updates
  - Resolved (lots of issues)
  - Not fully resolved (a few issues)

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IDs

ID Issues

- Current ID scheme does not allow Entitlements to be as specific or non-specific as required
- EIDR helps, but adoption of EIDR is incomplete
- EIDR registration doesn’t necessarily make sense for short-lived or dynamically changing objects
- ID definitions incomplete and usage inconsistent
  - ContentID (Abstraction)
  - ProductID (Edit)
  - EncodeID (Manifestation)
  - AvailID (undefined?)
  - AltID (fallback)

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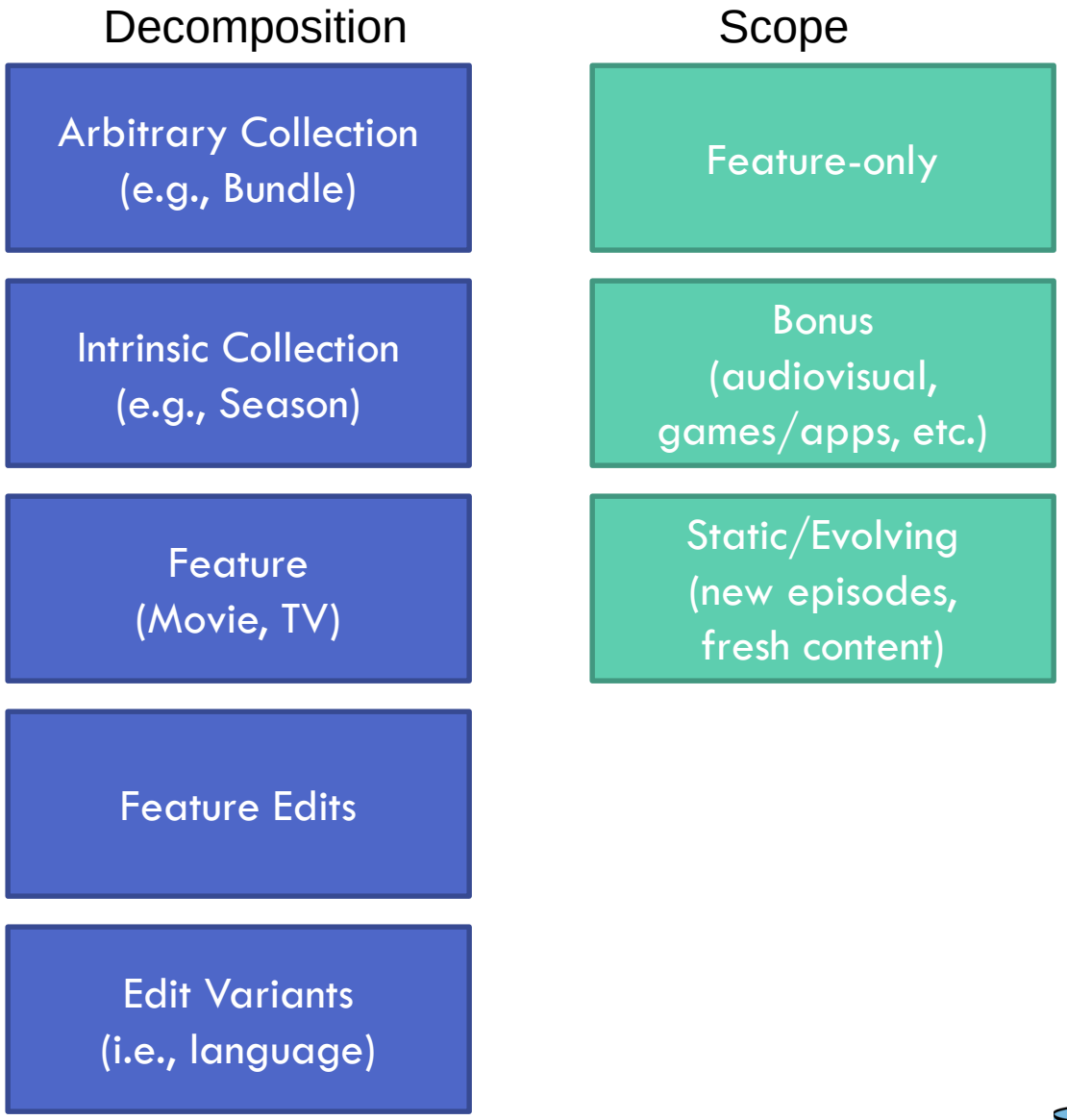
Products/Entitlements

- Product* could be almost anything
  - "Star Trek TOS Movie Bundle", movie only, any edit, any language
    - US Theatrical Edits, any language
      - English-only
    - English-only, any edit
    - "Star Trek, The Search for Spock", any edit, any language
      - US Theatrical Edit
        - English-only
  - "Star Trek, The Search for Spock", with bonus, any edit, any language

*Terms "Product" and "Entitlement" are used informally here. The intuitive definition is "What the consumer gets", but not when or for how much. Informality is addressed later.



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Product Decomposition and EIDR

Arbitrary Collection (e.g., Bundle)	Abstraction/Compilation	"Level 1*"
Intrinsic Collection (e.g., Season)	Abstraction/Series Abstraction/Season	
Feature, Episode (Movie, TV)	Abstraction/TV Abstraction/Movie Abstraction/Supplemental	
Feature Edits	Performance/TV Performance/Movie Performance/Supplemental	"Level 2"
Edit Variants (i.e., language)	Manifestation/TV Manifestation/Movie Manifestation/Supplemental	"Level 3"

How does this map to:

- ContentID (Abstraction)
- ProductID (Edit)
- EncodeID (Manifestation)
- AvailID (?)
- AltID (fallback)

Encodes are also Manifestations, but probably not Avail'd

*unapproved terminology

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Product Scope and EIDR

Feature-only

Bonus (audiovisual, games/apps, etc.)

Static/Evolving (new episodes, fresh content)

- EIDR can do this, but that would require registry of every permutation
- EIDR-x is used to create identifiers based on EIDRs that have additional properties; e.g.,
  - EIDR-s
    - `md:alid:eidr-s:1012-7947-21D5-9D24-CC5F-H`
  - EIDR-x
    - `md:alid:eidr-x:1012-7947-21D5-9D24-CC5F-H:with_bonus`
    - `md:alid:eidr-x:1012-7947-21D5-9D24-CC5F-H:no_bonus`

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Additional Avail Challenges

- It's often early in the process and much is undefined/undecided
  - e.g., during pre-order, won't necessarily know what distinct edits will be required for different regions, what subs and dubs will be available when
- Organizations generating avails don't necessarily have access to all fulfillment information
  - e.g., may not know whether subtitles will be burned into video (distinct encode) or in separate tracks

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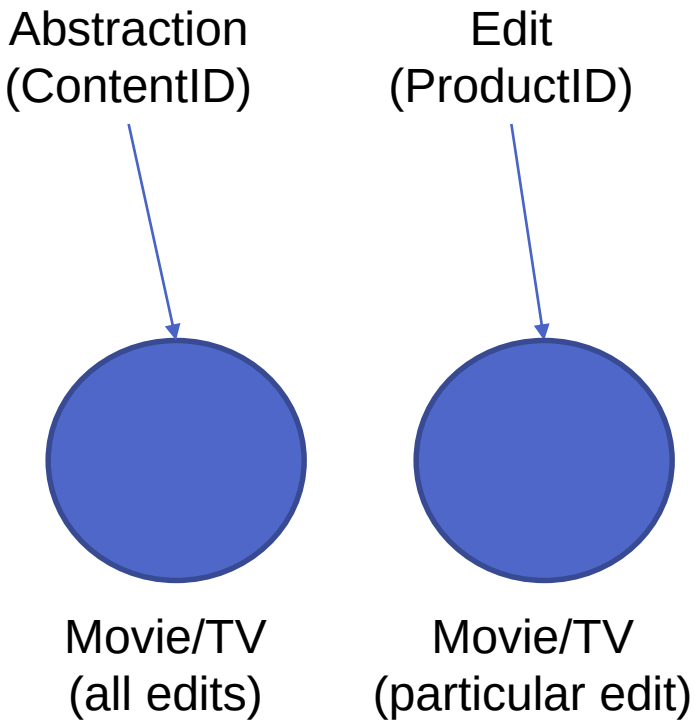
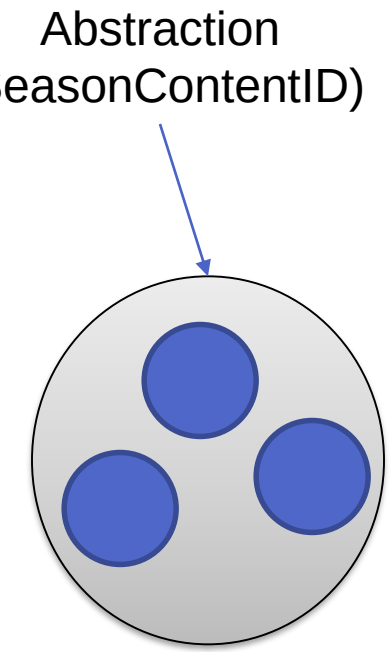
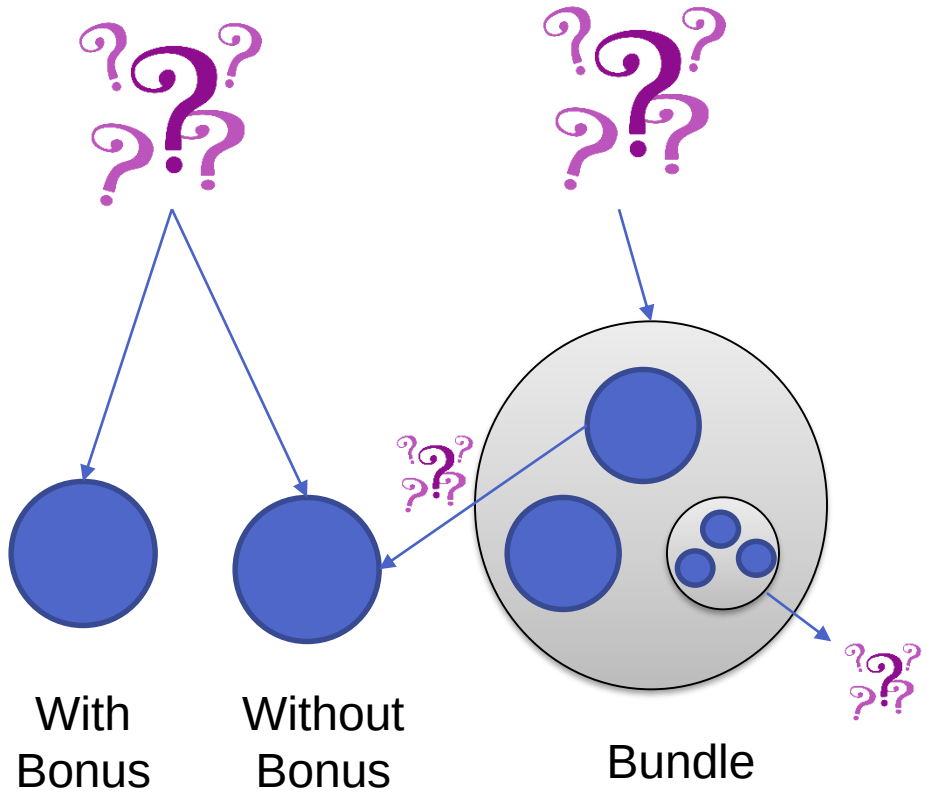
Current Excel model doesn't support all use cases

Confusing and Error Prone





Ambiguous



These IDs aren't frequently used as people use AltID.

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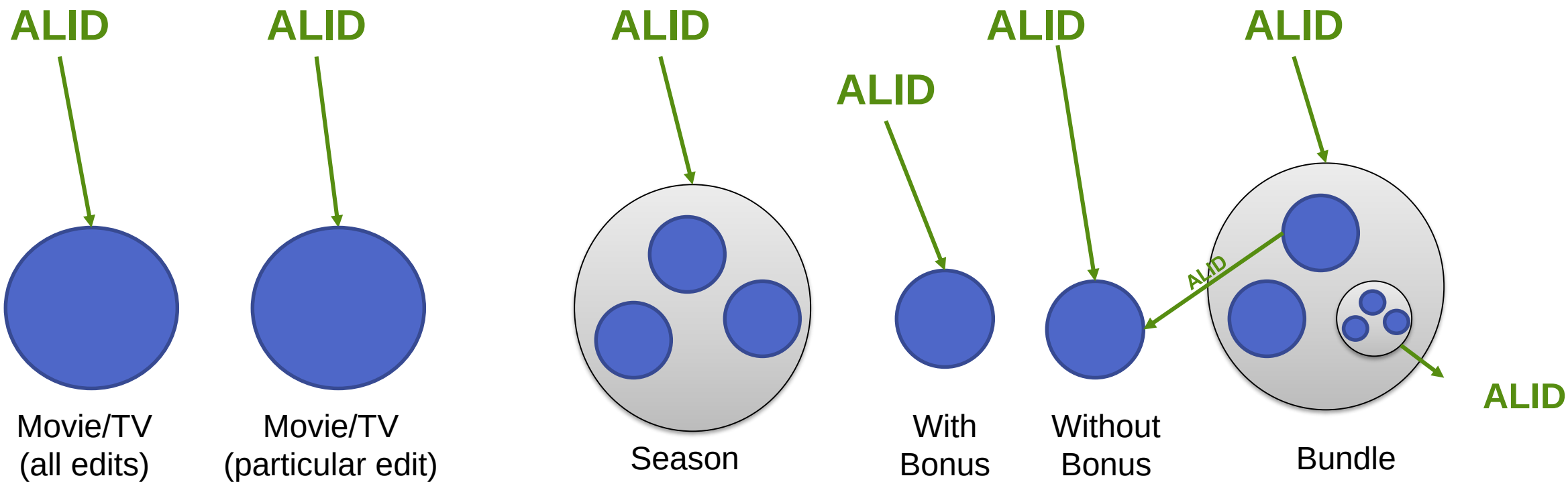
ALID proxy for all assets associated with Avail



Excel changes

- “AltID” → “ALID”
- ContentID – identifier for one movie, title or season (replace EncodeID, although not the same thing)
- TitleEIDR-URN – replaces existing ContentID (title level EIDR)
- EditEIDR-URN – replaces existing ProductID (edit level EIDR)

- Note: These align with XML

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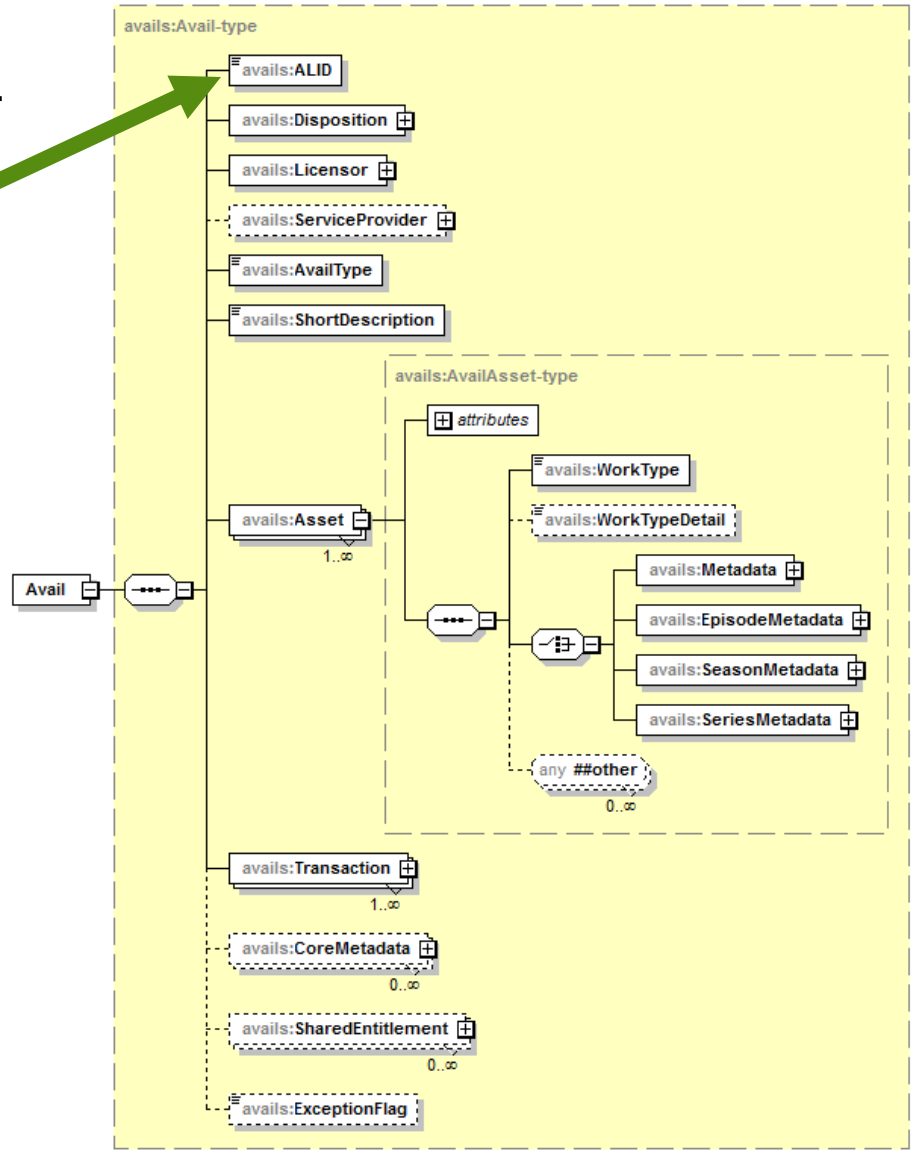
ALID

XML



Excel:

- AltID → ALID

Version 1.7 (Excel), 2.2 (XML)

Change Summary

- Add Time to Date. Clarify exactly what date+time means.
- Business Terms
  - Add currency to monetary values
  - Add “DMRP” (Deemed Minimum Retail Price) and “SMRP” (Suggested…)
  - Temporary price change (promotion)
  - LicenseRightDescription
  - GEMA
  - Language: Clarified/renamed StoreLanguage, HoldbackExclusionLanguage and HoldbackLanguage
- Next Generation Profile: Handling 4K, HDR, WCG, HDR and 3D
- IDs
  - for Entitlement Services
  - used in reporting
  - Proper asset identifier (ALID)
- Better definition of Full Extract
- Allow only . xlsx (no .xls or .csv)

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Resolved

Date and Time

- Problem
  - No way to encode time in Excel
  - When only a date is given, time is ambiguous
- Solution
  - XML: Always include time in XML (no change)
  - Excel:
    - either provide full ISO date+time format (based on ISO 8601, e.g., 2016-11-05T08:00:00-05:00) or include Excel-format date.
    - Dates without time are inclusive (i.e., start is from beginning of day, and end is at end of day). Excel-format date interpretation is subject to bilateral agreements.

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Date & Time Details

- Encode all time in ISO 8601 format (Excel, already in XML)
  - For example, 2015-11-15T12:00:00-8:00
- Date: yyyy-mm-dd or yyyymmdd
- Time: Thh:mm:ss or Thhmmss
  - Always include
  - No resolution finer than seconds except by bilateral agreement
- Global ~~or local time~~
  - Global time: Include time zone ('Z' for UTC, or ±hh)
    - UTC preferred
    - No minutes unless by bilateral agreement
    - Always global time
- XML: Add 'ESTstart" as allowable value for EndCondition
  - Spec-only
- Excel: Allow "Open" in date (note: retailers proposal was "TBD")

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Solution to missing Currency in Excel

- Recommendation (Excel-only)
  - Add PriceCurrency currency column associated with PriceType & PriceValue
    - Note: No currency for SRP (assumes local currency)
  - 3-letter ISO 4217 code (same as XML)
- Clarification
  - Currency required, except for Tier (optional) and Category (N/A)
  - Omission of Currency is handled in accordance with bilateral agreement. In absence of specific agreement, Currency refers to local currency.

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DMRP – Deemed/Suggested Minimum Retail Price

- Add PriceType values for
  - “DMRP” – Deemed Minimum Retail Price
  - “SMRP” – Suggested Minimum Retail Price

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Language

- Language terms not working
  - StoreLanguage not adequately defined; effectively unused
  - People using HoldbackExlusionLanguage to list allowed languages
  - People unclear how to use HoldbackLanguage
- Conclusion
  - Change HoldbackExclusionLanguage to AllowedLanguages (optional) – Contractual (hopefully, typically absent implying any). Just language codes. In Excel, allow comma separated language.
  - Change StoreLanguage to AssetLanguage (language of available assets. Implicit promise to supply at least these languages) (optional). Need subs and dubs on each language. In Excel, one language per Avail.
  - Keep HoldbackLanguage (optional)
    - XML can holdback subs or dubs, but Excel can only holdback entire language

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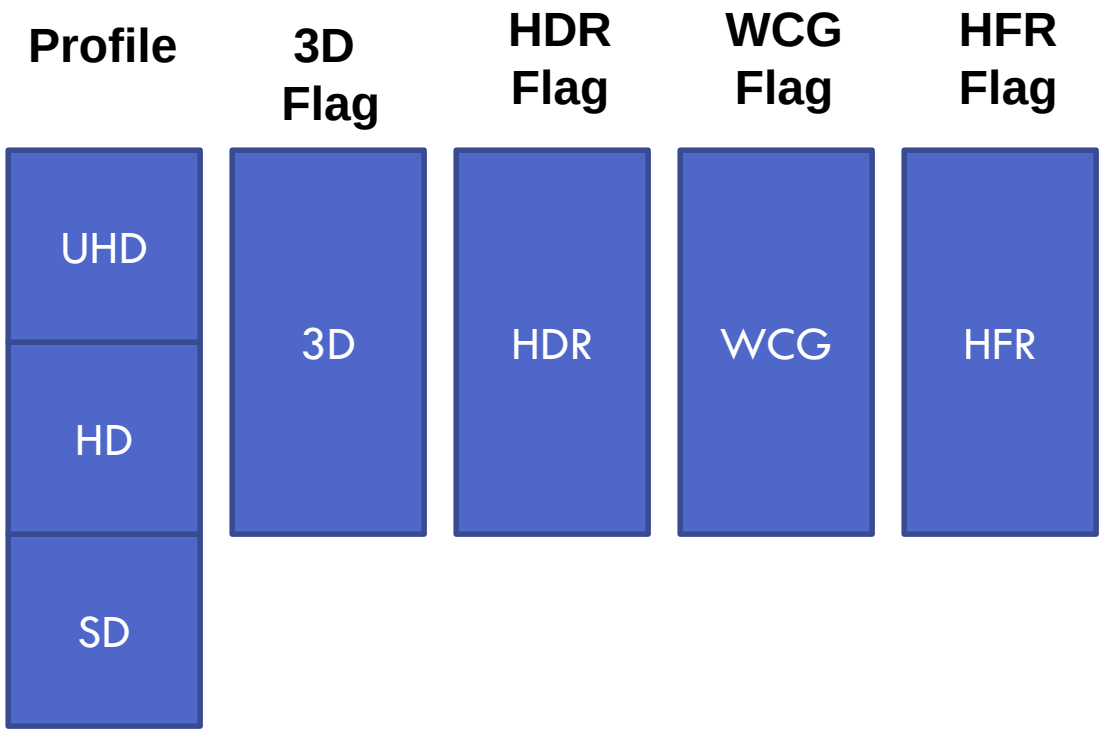
Need to specify next gen profiles

- Media Profile: SD, HD, UHD, …
- In some cases, avail of Media Profile implies additional features such as HDR and WCG
- In other cases, studio needs to explicitly specify features (3D, HDR, WCG, HFR)
- Solution:
  - Profile simplified
  - 3D, HDR, WCG and HFR flags added



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IDs

- Entitlement Services
- Use for reporting
- Formalize AltID?

IDs for Entitlement Services

- XML already handles entitlement services
  - XML can handle multiple IDs which is important for seasons
- Excel
  - Add UVVU and DMA columns
  - Note: won't work for UltraViolet seasons.

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IDs to use in reporting

- Problem
  - Looking to improve reporting constancy
  - Need uniform use of EIDR in reporting
- Conclusion
  - Investigate appropriate reporting IDs. Add if it seems appropriate.
- Added ReportingID for future use

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Scope of Full Extract

- Not clear on current practices: Do people replace *everything* or just one title?
- Scope
  - In XML, Full Extract applies to a single ALID
  - In Excel, Full Extract is not formally defined
- Solution
  - With inclusion of ALID in Excel, problem solved
    - No ambiguity
    - Approach is consistent

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.xls, .xlsx, .csv

- Solution
  - Only .xlsx
  - Only one tab
  - Parse by column name, not column position

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Bundles and Bonus Material

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Promo, Bonus and Bundle Requirements

Requirement	Examples
Movie with bonus	Great Movie, Making of Great Movie
TV season with bonus	Great TV Season 2, Season 1 recap
TV episode with bonus	Great TV S1E3, S1E3 3-minute summary
Arbitrary collection of products (TV, Movies, other Bundles)	{Great Movie, Great Movie II, Great Movie III} {Great Movie, Great TV Seasons 1 and 2} {Great Movie, Great TV Entire Series (season 1-5)}
Arbitrary collection of products, with bonus material	(all of the above, plus), Creating the character of John Great.

Bonus or Promotion could be available on different terms than feature
Need to precisely control availability of early trailers and pre-order bonus

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Promotion, Bonus and Bundles

- Bundle
  - Set of ALIDs (i.e., references set of Avails)
  - Bundle contains all the assets in those Avails, but with its own terms
- Promotion and Bonus
  - Promotion and Bonus offerings contain one or more ALID(s) that reference other Avails
  - Assets in Promo or Bonus have their own set of terms
  - Assumption is that ALIDs are in same Avail set (or avail'd previously)

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Following proposals

Requirement	XML	Excel*
Movie with bonus	Yes	No
TV season with bonus	Yes	Probably
TV episode with bonus	Yes	No
Arbitrary Bundle (TV, Movies, other Bundles)	Yes	No
Arbitrary Bundle, with bonus material	Yes	No

* (Excel) Of all the use cases, “TV season with bonus” is the easiest to do.

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Implicit Season Bonus in Excel

- Rows in are included for each season avail, episode avail and supplemental avail
- Implicit grouping is not a general solution, but might solve a near-term problem

Reference implicit in series and season IDs

If not for sale, PriceType="Season Only"

XML: Bundle

- New element: BundledAsset 0..n
  - List everything in Bundle
  - Terms override terms in referenced Avails
    - Might need to look at exceptions
  - Can specific metadata for bundle (it can have its own description)

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XML: Promotion and Bonus

- So far this satisfies every use case I've heard or can think of
- New AvailType: "promotion" and "supplemental"
- New element Term/RefALID
  - References the ALID to which promo or supplement apply
- Any WorkType(s) can be associated with the referenced ALID
  - That means anything ('movie', 'short', 'episode', 'season', 'collection', etc.) can be a promo/bonus for anything else ('movie', 'short', etc.)
- Terms (locale, timing, etc.) can be fully specified in Terms
- Note: referenced ALIDs must be in same set or Avail'd earlier

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Unresolved

LicenseRightDescription

- Request: Require LRD
  - Aids in prioritization and workflow
- Issue: No agreement on terms or what to do with them.
- Options
  - Require/don't require (yet)
  - Simplify/don't simplify
  - Refactor into better instructions how to process Avails. Rename. New term(s). Possibly require.
    - What drives ingest?
    - What drives storefront merchandising?
    - What is pricing (e.g., "Free", "Season Only")
- *Editorial: Seems like this is going grow out of control. How do you draw the line between Priority-Library and Mega-Library? What if it's Free Early VOD (e.g., bonus)*

- 'New Release' – New release
- 'Library' – Catalog title
- 'Mega-Library' – High value library
- 'Priority Library' – Library content that must be processed with high priority.
- 'DD-Theatrical' – EST, VOD or Subscription availability, Day and Date with Theatrical
- 'Pre-Theatrical' – EST, VOD or Subscription availability prior to theatrical availability
- 'DD-DVD'–Day and Date DVD
- 'Early EST' – EST prior to DVD availability
- 'Preorder EST' – preorder EST prior to DVD availability (order, but not download or play)
- 'Early VOD' – VOD prior to DVD availability, also Preorder VOD
- 'Preorder VOD' – preorder VOD prior to DVD availability (order, but not download or play)
- 'DTV' – Direct to Video. I newly release feature that was not theatrically released.
- 'Next Day TV' – Content that is typically published day after initial broadcast date.
- 'Season Only' – Content only available with season purchase.
- 'Free' – Content offered at no cost. Terms must be consistent with a free offering.

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Working model for LRD

- Importance – Differentiates high-value products from deep catalog
- Priority – Indicates relative priority of title for processing. Measure of urgency
- Should we use terms or values
  - “Next Day TV” implies high importance, high priority
  - Or, just Importance=10, Priority=10

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Temporary/Promotional Pricing

- Further investigate:
  - Signal intentional overlap (Promo avail overlapping non-promo Avail)
    - Perhaps LicenseRightsDescription='TempPromo'.
    - Note: clarify implications of overlapping avails.

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GEMA

- GEMA data required for Germany
  - Production Country
  - GEMA Content Category (need enumeration)
- Recommendation
  - ~~XML: Add terms (note: assuming not asset metadata; applies to all assets)~~
    - ~~GEMACountry (ISO country code, consider adding Country element for improved validation)~~
    - ~~GEMACategory (*need appropriate enumeration*)~~
  - ~~Excel~~
    - ~~Add two columns GEMACountry and GEMACategory~~
  - Defer until studio lawyers weigh in. If studios say yes, then adopt the convention above.

Excel and XML Roadmap

Excel Issues

- Excel structure causing following
  - Running up against Excel file limits (stated at 1M lines, but seeing problems and 800K)
  - Row-based structure has lots of redundancy. Can have inconsistencies.
  - Difficult to manage updates (scope of replacement unclear)
  - Bundles and bonus impractical in Excel
  - More complex business terms difficult to support
  - Difficult to maintain (have to keep adding columns)
- Excel not designed for computer-computer interaction and there are consequences
  - Size limits
  - Processing complexity
  - Concerns about whether 3rd party libraries will handle all cases correctly

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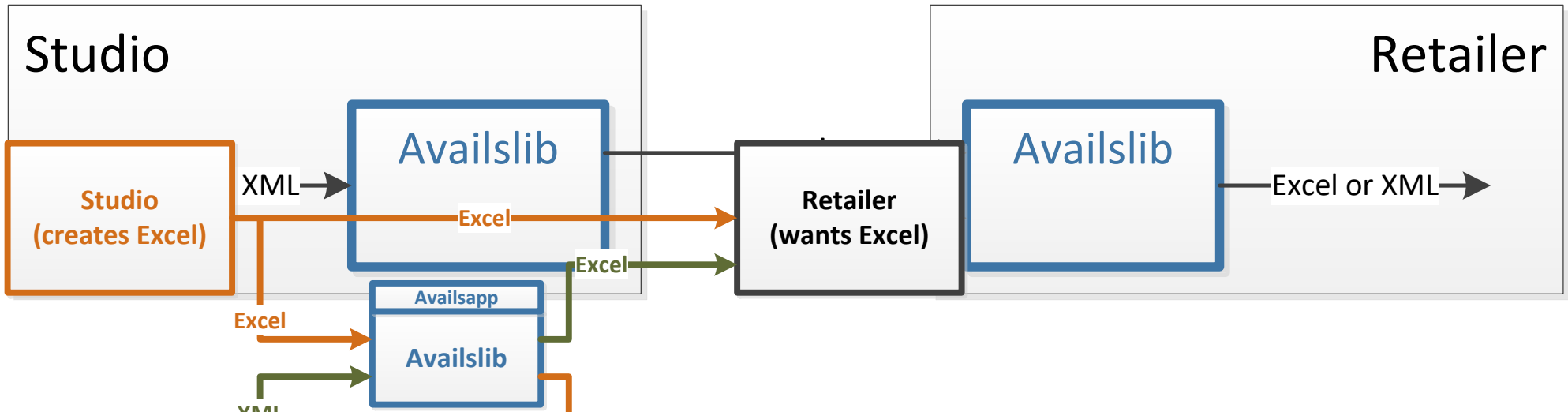
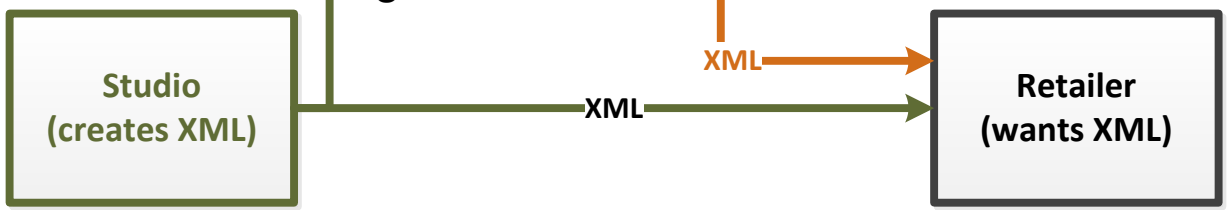
Factors for transition

- Need solutions for all studios and retailers, including a transition strategy
  - Translate Excel to/from XML with tools (within limits of Excel)



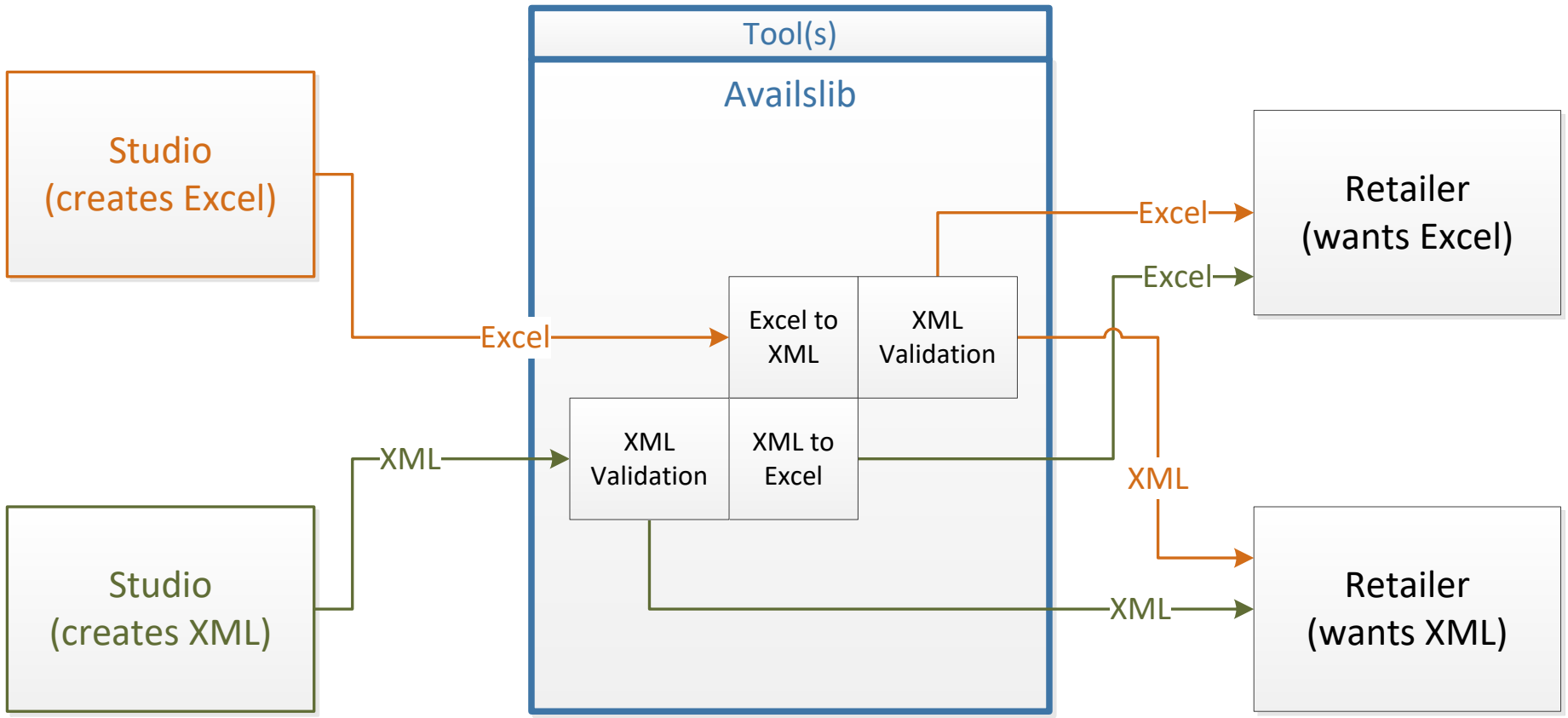
  - Or, use service organizations to translate



AvailsLib

- Validation and Translation

Code is available in these GitHub repositories:
Avails Library: https://github.com/MovieLabs/availslib
Avails Tool: https://github.com/MovieLabs/availstool



Recommendation

- Excel
  - Incorporate revisions from today into 1.7 Excel
  - No bundles
  - Bonus only for episode-like TV
  - This becomes the last full release of Excel
  - Revisions will be created periodically as needed, hopefully with only small changes
- XML
  - XML is ready today
  - Review potential changes for v2.2 release – MovieLabs to generate based on today's discussion
  - MovieLabs will produce examples. Submissions would be helpful.
  - Would like to kick off activity to produce something like MMC document (step-by-step with examples).

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Avails 2.2 Change list

Avails XML 2.2 Change List

- Added support for Bundles (BundledAsset)
- FormatProfile: Added UHD profile; and added 3D, HDR, WCG and HFR attributes
- Revised language handling: Replaced StoreLanguage, with AssetLanguage, replaced HoldbackExclusionLanuage with AllowedLanguages, added HoldbackLanguage include asset type attribute, removed Holdback Terms.
- Added Region term type.
- Pricing: Added DMRP, SMRP, GEMA and Bundled (not sold separately) terms.
- Added ReportingID for future use.
- Added Depreciated EcosystemID
- Made optional:
  - TitleDisplayUnlimited, SeasonTitleDisplayUnlimited and SeriesTitleDisplayUnlimited
  - Terms/Description
  - Fixed ratings cardinality in spec (was correct in schema)
- Added support for separately availed supplemental and promotion including AvailType values and Transaction/RefALID.
  - Note that supplemental and promotion can also be included in an Avail through Asset instances.

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