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Review Incentive

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Information Model - Streaming Service - Part 2

Overview @

This document defines the complete information model for the DCP+ Streaming Service platform. It brings together three complementary views of the data required to support DCP+:

- 1. **Structural view (UML-style diagrams)** inheritance hierarchies and association lines show how the main entity groups relate to one another (e.g., $Production \rightarrow Feature \rightarrow Film$, or $Viewer \rightarrow Profile \rightarrow Active Video$).
- 2. **Semantic view (attribute tables)** every entity lists its attributes with data type, mandatory/optional status, validation rules and default values.
- 3. **Governance view (business-rule call-outs)** explicit life-cycle and integrity constraints (for example, "Feature Videos can never be deleted once created", or "Promotion Videos must always include an English subtitle track when the audio is not English"). These rules clarify how data is seeded, created, updated, retired and, in some cases, protected from deletion.

Intent of the DCP+ Streaming-Service Information Model ${\mathscr O}$

✓ Intent of the DCP+ Streaming-Service Information Model

The information model is meant to be the *single, canonical blueprint* for how every team at DCP+ talks about—and technically stores—Streaming Service data. Its aims can be summarised in five points:

	Goal	What it Means in Practice
1	Shared vocabulary	All stakeholders (product, engineering, data, UX, legal) use the same names and definitions for concepts such as <i>Production, Feature Video, SVOD Feature SKU</i> , and <i>Viewer</i> . The model's diagrams and attribute tables eliminate ambiguity when features are discussed or tickets written.
2	Data-integrity guard-rails	Lifecycle constraints and business rules—e.g., "a SKU is never deleted" or "a Viewer can only like a Feature they have completed" —ensure that database schemas, APIs, and analytics pipelines cannot accept invalid states.
3	Governance & compliance	Seeded reference sets for ISO languages, ISO countries, ratings, and VPN blocklists, plus immutability rules on prices and parental ratings, give auditors and regulators a clear line-of-sight into how content availability, age restrictions, and regional blocks are enforced.
4	Implementation blueprint	Engineers can map each entity directly to relational tables, document collections, or event streams, confident that relationships (e.g., $Video \rightarrow Feature, Profile \rightarrow Active Video, SKU \rightarrow Production$) are formally specified. The model also highlights where inheritance vs. composition is appropriate, guiding object models and API contracts.
5	Acceleration of new work & onboarding	By reading the top-level diagrams first, a new developer or analyst can see what exists and how it fits together before diving into code. Product managers can reference the model to spot gaps (e.g., no entity for Live Event) and propose extensions in a controlled way.

In short, the information model's intent is **to align communication, anchor data governance, and de-risk delivery** by giving everyone a rigorously defined, life-cycle-aware map of the DCP+ Streaming Service domain—well before they start writing schemas, endpoints, or SQL.

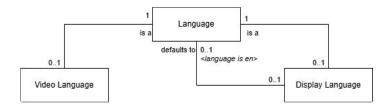
Domain at a glance @

Area	Core Concepts	Typical Relationships & Highlights
Localization	Language, Display Language, Video Language, Translated Text / Image	ISO-seeded language Catalogue; strict 1-to-1 mapping between every base language and its display/audio roles; all user-facing text and images require translations for each supported display language.
Content Catalogue	Production (Film Series, TV Series, Season, Feature, Episode), Video (Feature, Promotion), Promotion Image	Hierarchical composition lets series nest seasons and episodes; media assets (videos & images) attach at the appropriate level and inherit language & expiry rules; videos carry single-language audio, multi-language subtitles, and immutable storage constraints.
People & Credits	Person, Collaborator, Cast, Crew, Job	Supports multi-role collaborators (e.g., actor-director) with ordered billing; job taxonomy distinguishes cast vs. crew and enforces allowed roles (Creator, Director, Writer, Producer); collaborators link directly to productions and IMDb profiles.
Classification & Compliance	Genre / Subgenre, Ratings (MPA, TV-PG, DCP), Country Exclusions,	Ordered genres & subgenres drive discovery; three rating systems gate age-appropriate access; ISO-country blacklist plus VPN block-

	Blocked VPN	list control regional availability; ratings & price fields are immutable after creation for auditability.
Curation & Discovery	Collections (Smart, Top-Rated, Genre, Recommended, Curated, Spotlight, Titled), Catalogues (Global, Studio), Search	Curators or rules populate collections; each Catalogue owns exactly one Spotlight & Top-Rated collection; genre collections are one-pergenre per Catalogue; search history is capped & de-duplicated for each profile.
Audience & Identity	Viewer, Wallet, Profile (Anonymous, Viewer)	Binds blockchain wallet (TALNT balances, reputation) to viewer accounts; profiles store preferred display/subtitle languages, genres, and rating ceilings; a viewer may host multiple profiles with default & active rules.
Commerce	SKU hierarchy (Free, Subscription, Series, Feature), Subscription, Purchased Production, Rented Feature, Payment Top-Up	One active SKU per production; life-cycle is activate → inactivate (never delete); subscriptions bill on monthly anniversaries with grace-period logic; purchases & rentals debit TALNT via on-chain wallet, with top-ups when balance is low.
Engagement Tracking	Active Video, Viewed Feature, Liked Feature, Evaluated Feature, Search History, Bookmarks, Notifications	Active-video tracks playback every 5 s (max 10 per profile); viewed-feature locks once video ends; likes only after completion; numeric reviews flow through moderation & optional TALNT rewards; notifications surface billing, expiry, and review events.

Model *⊗*

Figure - Language @



Language 🖉

A **Language** describes a particular <u>ISO 639 language</u>. We need to discuss language as DCP+ is a multilingual app and language has an impact on elements of this information model. The system is seeded with a pre-defined list of Languages. See later for details.

Attributes: Language

Attribute	Data Type	Require d	Details
Code	String	•	An ISO 639 2-character language code. For example, the code for English is <i>en</i> , and the code for Spanish is <i>es</i> Business rules: • Value governance: Must be a valid ISO 639 2-character language code • Uniqueness: Value is globally unique.

Display Language 🔗

A **Display Language** is a Language that can be used for displaying UI labels and a production's (film, TV show, series) display text, such as its title, description or a display image, such as its cover image.

Association constraint: Language – (is a) Display Language

- A Language must only be assigned as a Display Language once. The total set of Display Languages must be unique.
- English (en) must be assigned as a Display Language.

Association constraint: Language – (defaults to) Display Language

The default Display Language must be English (en). It can not be any other Language.

Runtime requirements: Display Language

When the Streaming App is loaded and <u>no end-user is signed in</u>, it will attempt to auto-detect the best Display Language to use based on information found in the particular device it is on. If the detected language on the device is a supported Display Language, it will use it, and if not, it will fall back to presenting the display in the <u>default</u> Display Language.

Video Language 🔗

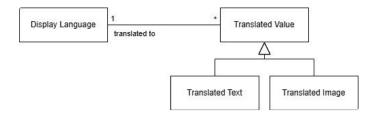
A Video Language is a Language that can be used for a video's audio track or subtitle track.

Association constraint: Language - (is a) Video Language

A Language must only be assigned as a Video Language once. The total set of Video Languages must be unique.

1 The list of seeded Languages can be found here: Seeded Languages - Streaming Service

Figure - Translated Value 🕖



Translated Value 🔗

A **Translated Value** holds a translated version of a particular property's unstructured value. Properties that hold unstructured values to be presented to end-users must have a value for each supported Display Language. Translated Values are supported for text and image data types. For example, if a film is for *Star Wars*, then there must be a translated value of the title for Display Language English (en) (e.g. "Star Wars") and Spanish (es) (e.g. "Guerra De Las Galaxias").

Translated Text 🔗

Translated Text is a type of Translated Value used to hold a text value.

→ Attributes: Translated Text

Attribute	Data Type	Required	Details
Value	String	•	The text value for the associated Display Language.

Translated Image 🔗

A Translated Image is a type of Translated Value used to hold an image value.

→ Attributes: Translated Image

Attribute	Data Type	Required	Details
Value	URL	•	The URL that locates the image for the associated Display Language.

Figure - User *⊘*



User 🔗

A **User** is an account that belongs to an individual within the DCP <u>platform</u>. This could be a User who is a DCP User (a User that has uses the DCP application) or a DCP+ User (a User that has uses the DCP application) or both.

1 A User is bound to a <u>User</u> as defined in the <u>Account Context</u>.

→ Attributes: User

Attribute	Data Type	Requir ed	Details
Id	Identifier	•	An identifier that uniquely identifies a User. Business rules: • Value governance: derived from the bound User.Id • Uniqueness: Unique among all Viewers

Wallet 2

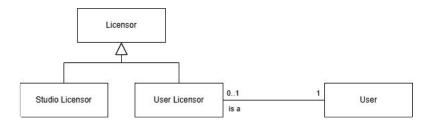
A **Wallet** identifies a User's account on the TALNT Net blockchain via a publicly visible address and conveys the User's TALNT <u>available</u> balance held in their Film Ledger <u>User Account</u>.

1 The Wallet is bound to a Wallet as defined in the Account Context.

→ Attributes: Wallet

Attribute	Data Type	Requir ed	Details
Address	PKH	•	The current public key hash (PKH) of a User's TALNT Net account. Business rules: • Value governance: derived from the bound User.Wallet.Address • Uniqueness: Unique among all Wallets
Balance	TALNT	•	A User's TALNT Net cryptocurrency held in their <u>User Account</u> Balance. Business rules: • Value governance: derived from the bound <u>User.Wallet</u> .DCPBalance

Figure - Licensor *⊘*



Licensor @

A **Licensor** is a party that grants streaming permission to DCP+ to make their film and TV productions available to viewers in the Streaming App and receives royalties in return. In the context of DCP+, a Licensor owns a production they grants rights to it. A Licensor sets limits to constrain the number of concurrent views of their licensed content purchased or rented by a viewer account. Further details on concurrent viewing constraints are provided later.

Attributes: Licensor			
Attribute	Data Type	Requ	Details
Name	List< <u>Translate</u> d Text>	•	The Licensor's name. For a User Licensor, this could be their their first name and last name. For a Studio Licensor, this could be the studio's name.
			Business rules: Translations: There must be Translated Text for each supported Display Language.

Avatar	List< <u>Translate</u> d Image>	•	The primary image presented to the viewer when presenting the Licensor in a collection or search results. For example, the logo for Sony Pictures is SONY PICTURES Business rules:
			Translations: There <u>must be</u> a Translated Image <u>for each</u> supported Display Language.
Maximum Purchased Views Per Account	Non-Negative Integer	•	Specifies the maximum number of registered devices that can concurrently view a Licensor's feature (film or TV show) <u>purchased</u> by a viewer account.
			Business rules: Default value: 3 Minimum value: 1 Maximum value: 10
Maximum Purchased Views Per Feature	Non-Negative Integer	•	Specifies the maximum number of registered devices that can concurrently view a <u>single</u> feature (film or TV show) <u>purchased</u> by a viewer account. Business rules:
			 Default value: 2 Minimum value: 1 Maximum value: Value must be less than or equal to Maximum Purchased Views Per Account
Maximum Rented Views Per Account	Non-Negative Integer	•	Specifies the maximum number of registered devices that can concurrently view a Licensor's feature (film or TV show) rented by a viewer account.
			Business rules: Default value: 2 Minimum value: 1 Maximum value: 10
Maximum Rented Views Per Feature	Non-Negative Integer	•	Specifies the maximum number of registered devices that can concurrently view a single feature (film or TV show) rented by a viewer account.
			Business rules: Default value: 1 Minimum value: 1 Maximum value: Value must be less than or equal to Maximum Rented Views Per Account

Studio Licensor 🔗

A **Studio Licensor** is a type of Licensor that represents a production studio that is licensing productions from its library. Examples of a Studio Licensor include Sony Pictures and Warner Bros.

Attribute	Data Type	Require d	Details
DUNS Number	Non-Negative Integer		The Data Universal Numbering System (DUNS) is a proprietary system developed and managed by <u>Dun & Bradstreet</u> (D&B) that assigns a unique numeric identifier, referred to as a "DUNS number," to a single business entity. Globally, it is the primary means of uniquely identifying a particular business. Enforcing a DUNS Number ensures that a Studio Licensor is not added multiple times.
			Business rules: • Uniqueness: Value must be unique among all Studio Licensor

User Licensor @

A **User Licensor** is a type of Licensor for an <u>individual</u> that has licensing rights to that makes certain productions availble to DCP+. A User Licensor has an account with the DCP application and uses the DCP application to upload their productions for DCP+. Examples of a User Licensor include an individual who has created their own film independently of a major production studio and uploads it to the Streaming Service through the DCP application.

Attributes: User Lice	nsor		
Attribute	Data Type	Require d	Details
IMDb Profile	URL	8	A reference to the User Licensor's profile page on IMDb. Business rules: • Uniqueness: non-null value must be unique among all User Licensors. • Format: must be a valid IMDb profile URL, for example, Cutter Hodierice Director, Producer, Writer

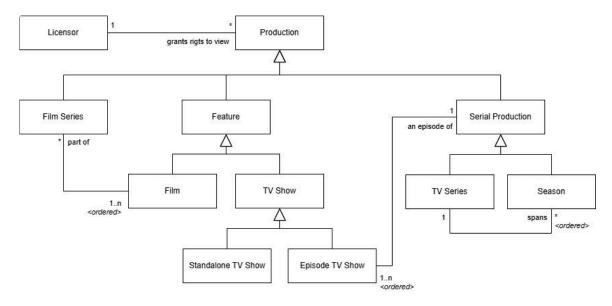
Association: User – (is a) User Licensor

A User that licenses productions for DCP+ is a User Licensor.

Association constraint: User – (is a) User Licensor

The User Licensor is bound to a <u>DCP User</u> as defined in the <u>Account Context</u>.

Figure - Production *⊘*



Production ${\mathscr Q}$

A **Production** is a cohesive unit of content, such as a film, TV show, film series, or TV series.

Attribute	Data Type	Require	Details
		d	
Id	Identifier	•	The Production's unique identifier.
Title	List< <u>Translated</u>	•	The Production's title.
	<u>Text</u> >		Business rules:
			Translations: There <u>must be</u> Translated Text <u>for each</u> supported Display Language.
Cover Image	List< <u>Translated</u> <u>Image</u> >	•	The primary image presented to the viewer when presenting the Productio in a collection or search results.
			Business rules:
			Translations: There <u>must be</u> a Translated Image <u>for each</u> supported
			Display Language.
Logline	List< <u>Translated</u>	×	The Production's logline.
	<u>Text</u> >		Definition: A logline is a brief (usually one-sentence) summary of a TV sho
			or film, that states the central conflict of the story, often providing both a
			synopsis of the story's plot, and an emotional "hook" to stimulate interest.
			Business rules:
			• Required: A value <u>is required</u> when the Production type is a Feature.
			• Translations: When a value is set, there <u>must be</u> Translated Text <u>for each</u>
			supported Display Language.
Description	List< <u>Translated</u>	8	A summary that describes the content of the Production.
	<u>Text</u> >		Business rules:
			Required: A value is required when the Production type is a Feature.

			Translations: When a value is set, there <u>must be</u> Translated Text <u>for each</u> supported Display Language.
Escrow Balance In USD	Float	•	When a viewer makes a payment to purchase or rent a Production, the payment (minus 5% payout to DCP and <%> payout for affiliate marketer) is held in escrow until payouts occur. The funds held in escrow are used to pay the Licensor for licensing the production and optionally for viewers who write incentivized reviews. See later for details.

Association: Licensor – Production

The Productions associated with a Licensor indicate the set of Productions a Licensor licenses and grants viewing rights to.

Film Series 🔗

A **Film Series** is a type of Production encompassing a collection of related films in succession that share the same fictional universe or are marketed as a series; for example, *The Godfather* saga, the *James Bond* franchise, and the *Wizarding World*. A Film can be associated with multiple Film Series; for example, *Spider-Man: Homecoming* is related to both Sony's *Spider-Man* film series and Marvel's *Marvel Universe* film series.

Serial Production @

A **Serial Production** is a type of Production encompassing <u>serialized</u> or <u>episodic</u> content produced and released in multiple parts over time, such as a TV series or seasons within a TV series. Serialized content refers to a story that progresses across multiple episodes or seasons, with each episode building upon the previous one, as seen in shows like *Breaking Bad*. Episodic content tells a self-contained story, often featuring recurring characters but no ongoing narrative, such as *The Simpsons*.

TV Series @

A TV Series is a type of Serial Production that runs under a single title, for example, Game of Thrones.

Season 🖉

A **Season** is a type of Serial Production that allows a TV Series to be segmented across multiple seasons, for example, the *Game of Thrones* TV series spanned 8 seasons from 2011-2019. A Season doesn't have to encompass a "full season". In some cases, a full season can be broken down into units called half or split seasons.

Attributes: Season

Attribute	Data Type	Required	Details
Number	Non-Negative Integer	•	Identifies the Season's order among other Seasons. Business rules: • Minimum value: 1 • Uniqueness: Value must be unique among all Seasons associated with a TV Series.
Year	Year	•	A 4-digit integer representing the year the Season was released.

Association: TV Series - Season

- A TV Series conveys the Seasons it spans. Not all TV series span multiple Seasons; for example, the miniseries *The Queen's Gambit*, released in 2020, comprised seven episodes within a single season.
- All Seasons within a TV Series are ordered based on their Number.

Feature @

A **Feature** is a type of Production that is the primary content a viewer will ultimately view.

Attributes: Feature

Attribute	Data Type	Requir ed	Details
Duration In Seconds	Non- Negative Integer	•	The total duration of the Feature in seconds.
Acquisition Period Ends On	DateTime	8	 Specifies when the Feature can no longer be acquired for viewing. When this date elapses, the end-user may no longer browse or search for the Feature. However, If the end-user has already purchased the Feature before the acquisition period ends, they will still have access to it and can freely view it for as long as it has not expired. If the end-user has already rented the Feature before the acquisition period ends, they will still have access to it and can freely view it for as long as the rental window has not ended. If the end-user has started viewing a Feature that can be acquired through FVOD, AVOD, or SVOD before the acquisition period ends, they can finish viewing it as long as it has not expired and still appears in the active viewing list. See later for details on Feature acquisition and active viewing. Business rules: Value constraint: When dealing with Features that are part of a series, the Features must be treated in a consistent and intuitive manner. Therefore, when the Feature is an Episode TV Show or a Film that is part of a Film Serie : A value for Acquisition Period Ends On can not be set for a Feature unless the first Feature in the series (based on order) has a value set. Excluding the first Feature in a series, the value set for Acquisition Period Ends On must be greater than or equal to the prior Feature in the series.
Expires On	DateTime	8	Specifies when a Feature is no longer available for viewing on DCP+, regardless of how it was acquired. When this date elapses, the end-user may no longer view the video associated with the Feature, even if they actively view it (see late for details).
			Business rules:

Required:
 Expires On must be null when Acquisition Period Ends On is null.
 Expires On may optionally have a value when Acquisition Period Ends On
is not null.
• Value constraint: Value must be at least four days greater than the
Acquisition Period Ends On. This provides a suitable viewing window for an
end-user to complete viewing a Feature in situations where they start the
Feature just before the Acquisition Period Ends On.

Constraint: Feature

Once a Feature is created, it can never be deleted.

Film 🔗

A **Film** is a type of Feature that typically tells a complete story in one sitting, such as a movie. In some cases, such as the Lord of the Rings trilogy, a story may span multiple Films.

✓ Attributes: Film

Attribute	Data Type	Requir ed	Details
Release Year	Year	•	The year the Film was released. For example, <u>Star Wars: Episode IV - A New Hope</u> was released in 1977.

Association: Film - Film Series

- A Film may optionally be associated with a Film Series to indicate its part in a greater collection of films.
- All Films within a Film Series are ordered based on their Release Year.
 - o Assumption: Films in a Film Series will not have the same Release Year

Association constraint: Film – Film Series

A Film can only be associated with a Film Series from the same Licensor.

Acquisition period ends: Film Series

By definition, a Film Series acquisition period ends when the first Film's acquisition period has ended.

TV Show 🔗

A **TV show** is a type of Feature for any content produced for viewing on television and traditionally broadcast via over-the-air, satellite, or cable. A TV Show typically consists of a series of episodes that tell a story over time, explore a topic, or present entertainment content; however, TV Shows can also be standalone.

Attributes: TV show

Attribute	Data Type	Require d	Details
Release Date	Date	•	The date the TV Show was released. For example, The Last of Us episode " <u>Through</u> the Valley." was released on 2025-04-25.

Standalone TV Show @

A **Standalone TV Show** is a type of TV Show that is self-contained, meaning it tells a complete story in one viewing without requiring viewers to have watched previous episodes to understand the plot.

Episode TV Show @

An **Episode TV Show** is a type of TV Show that is a single installment or chapter within a Serial Production. Each episode contributes to the overall narrative, theme, or concept of the series. However, depending on whether the show is serial or episodic, the level of self-containment or interconnectivity with other episodes may vary.

Association: Episode TV Show – Serial Production

- An Episode TV Show associated with a Serial Production is a single installment within the Serial Production.
- All Episode TV Shows within a Serial Production are ordered based on their Release Date.
- The order number shown for an Episode TV Show is discerned from its order in the Serial Production. The first Episode TV Show's number is 1, the second is 2 and so on.

Association constraint: Episode TV Show – Serial Production

An Episode TV Show can only be associated with a Serial Production from the same Licensor.

Association constraint: TV Series – Season/Episode TV Show

A TV Series can be associated with either a set of Episode TV Shows or Seasons, but not both.

Acquisition period ends: Season

By definition, a Season's acquisition period ends when the first Episode TV Show's acquisition period has ended.

Acquisition period ends: TV Series

By definition, a TV Series acquisition period ends under the following conditions.

- A TV Series with a set of Episode TV Shows: The acquisition period ends when the first Episode TV Show's acquisition period has ended.
- A TV Series with a set of Seasons: The acquisition period ends when the first Season's acquisition period has ended.

Figure - Collaborator ${\mathscr O}$



Person @

A **Person** is a human being regarded as an individual.

→ Attributes: Person

Attribute	Data Type	Requir ed	Details
Name	List< <u>Translate</u> d Text>	•	The name of the person. For example, "Adam Scott." Business rules: • Translations: There must be Translated Text for each supported Display Language.
IMDb Profile	URL	8	A reference to the person's profile page on IMDb. For example, Adam Scott's profile is https://www.imdb.com/name/nm0004395/ Business rules: • Uniqueness: non-null value must be unique among all Persons. • Format: must be a valid IMDb URL for a person's profile.

Collaborator ${\mathscr Q}$

A **Collaborator** is a Person who is involved in collaborating on a Production.

Job 🖉

A **Job** describes the type of function a Collaborator, such as a cast member or crew member, performs on the Production.

Cast 🖉

A $\pmb{\mathsf{Cast}}$ is a type of Job a Person performs to provide a Production's on-screen acting performance.

→ Attributes: Cast

Attribute	Data Type	Require	Details
		d	

Character Name	List< <u>Transl</u> ated Text>	•	The name of the character in the production. For example, the actor "Adam Scott" plays the character "Mark Scout" on the TV show "Severance". Business rules: • Translations: There must be Translated Text for each supported Display Language.
Display Order	Non- Negative Integer	•	The order in which to present the set of Cast specified for a Production. This allow the lead actor, such as "Adam Scott" on "Severance," to be displayed before supporting actors.
			 Business rules: Minimum value: 1 Maximum value: equates to the number of Cast Value governance: The value is a monotonically increasing value starting at 1.

Crew @

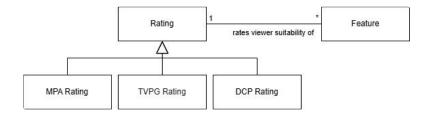
A Crew is a type of Job a Person performs to provide the Production's off-screen support, such as a director, writer or producer.

Attribute	Data Type	Require d	Details
Role	Enumerati on		A label that defines the role performed by the Crew member that can be readily translated to a different language. Business rules: Allowed values: Creator Director Writer Producer

Association: Collaborator – Job

A Collaborator must perform at least one Job in a Production but may also perform multiple Jobs. For example, Mel Gibson was the director, producer and actor in the movie *Braveheart*.

Figure - Rating @



Rating \mathscr{O}

A **Rating** rates a Feature's suitability for specific audiences based on its content.

MPA Rating 🖉

An **MPA Rating** describes the Motion Picture Association (MPA) rating for a Film. For more details, refer to $\overline{\text{w Motion Picture Assoc}}$ iation film rating system.

→ Attributes: MPA Rating

Attribute	Data Type	Require d	Details
Label	Enumer		A human-readable label that identifies a particular rating that can be readily translated to a particular language or displayed as a graphic. The value for the Label is used to look up details about the MPA Rating. For example, the Label "G" pertains to the following details: •
			∘ PG-13 ∘ R
			• NC-17

TVPG Rating ${\mathscr O}$

A **TVPG Rating** describes the rating system for TV Parental Guidelines (TVPG) in the United States. A TVPG Rating applies to a TV Show. For more details, refer to \overline{W} TV Parental Guidelines .

→ Attributes: TVPG Rating

Attribute	Data Type	Require d	Details
Label	Enumer ation	•	A human-readable label that identifies a particular TVPG Rating that can be readily translated to a particular language or displayed as a graphic. The value for the Label is used to look up translated details about the TVPG Rating. Fo example, the Label "TV-Y" pertains to the following details:

This program is designed to be appropriate for all children. (with translations for each Display Language) Business rules:
Allowed values: The following values are presented in order of least restrictive to
most restrictive.
• TV-Y
• TV-Y7
∘ TV-G
• TV-PG
• TV-14
• TV-MA

DCP Rating $\,\mathscr{Q}\,$

A **DCP Rating** describes the rating system established by Decentralized Pictures (DCP). A DCP Rating applies to any type of Feature. A DCP Rating is used when the Feature can not be rated with an official MPA Rating or a TVPG Rating

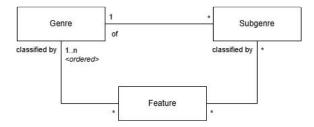
→ Attributes: DCP Rating

Attribute	Data Type	Require d	Details
Label	Enumer		A human-readable label that identifies a particular DCP Rating that can be readily translated to a particular language or displayed as a graphic. The value for the Label is used to look up translated details about the DCP Rating. For example, the Label "TBD" pertains to the following details: • ??? some icon • ??? (with translations for each Display Language) Business rules: • Allowed values: The following values are presented in order of least restrictive to most restrictive. • 2+ - Aimed at a very young audience ages 2-6. • 7+ - Children age 7 and up. • E - Suitable for all ages, not necessarily a children's show. Interest skews older kids/adults. (e.g. home improvement show) • 10+ - Roughly 10-13 years with a parent nearby. May be unsuitable for younge children. • 14+ - 14-16 years but watch with discretion. May be unsuitable for children under 14. • 17+ - 17 years or older. Intended for mature, adult audiences. May be unsuitable for people under 17.

Association constraint: Rating - Feature

- An MPA Rating <u>may only</u> be associated with a Film.
- A TVPG Rating may only be associated with a TV Show.
- A DCP Rating may be associated with any Feature.

Figure - Genre @



Genre @

A **Genre** is a category or classification of a Feature based on a set of stylistic criteria. Understanding genre helps audiences identify and anticipate the content and form of a work, influencing their expectations and experiences. Examples of Genres include drama, science fiction, documentary, fantasy, and comedy. The system is seeded with a pre-defined list of Genres.

Attributes:	Attributes: Genre					
Attribute	e Data Type	Required	Details			
Label	String	•	A human-readable label that defines a Genre that can be readily <u>translated to a particular language</u> .			

Subgenre @

A **Subgenre** is a smaller, more specific category or style that falls within a larger Genre. For example, Subgenres of the *comedy* Genre include *dark comedy*, *satire*, and *stand-up*.

∨ Attı	Attributes: Subgenre					
A	Attribute	Data Type	Required	Details		
Lo	abel	String	•	A human-readable label that defines a Subgenre that can be readily <u>translated</u> to a particular language.		

Association: Genre - Feature

The set of Genres associated with a Feature <u>is ordered</u> to convey which Genre has a stronger affinity with the Feature than other Genres. For example, the Genres that classify <u>Spirited</u> include (in order) Fantasy, Holiday, and Comedy, meaning that Spirited is

more related to the Fantasy Genre and less related to the Comedy genre.

Association constraint: Subgenre - Feature

A Feature <u>can only</u> be associated with a Subgenre if the Subgenre is of a Genre that the Feature is already associated with. For example, a Feature can't be related to the Subgenre <u>Legal Drama</u> (a subgenre of <u>Drama</u>) if the Feature is not associated with the Genre <u>Drama</u>.

1 The list of seeded Genres and Subgenres can be found here: Seeded Genres - Streaming Service

Figure - Country @



Country @

A Country describes a particular ISO 3166 country. The system is seeded with a pre-defined list of Countries.

Attribute	Data Type	Require d	Details
Code	String	•	An ISO 3166 2-character country code. For example, the code for Canada is CA, and the code for the United States is US Business rules:
			Value governance: Must be a valid ISO 3166 2-character country code Uniqueness: Value is globally unique.

Association: Feature - Country

A Feature is <u>optionally</u> associated with one or more Countries to convey those locations where a Feature <u>may not</u> be viewed. This relationship can be considered a blacklist. A viewer is not permitted to be presented with a Feature if their IP address with within the bounds of a particular blacklisted Country. This includes those Features that may have been previously purchased or rented by a viewer (see later for details).

Association constraint: Feature - Country

When Feature is an Episode TV Show, <u>all</u> Episode TV Shows with the <u>same root</u> TV Series must be associated with the <u>same set</u> of blacklisted Countries.

1 The list of seed Countries can be found here: Seeded Countries - Streaming Service

Figure - Blocked VPN @

Blocked VPN

Blocked VPN 🔗

A **Blocked VPN** specifies the IP address or IP address range of a blacklisted VPN. The set of Blocked VPNs will be limited to those VPN providers of ill repute. Viewers are not permitted to view any DCP+ content when their <u>current</u> IP address is on the blacklist. The list of Blocked VPNs is seeded. See later for details.

Attribute	Data Type	Requir ed	Details
Name	String	8	The name of the VPN service
IP Address	String	•	The VPN's IP Address or IP Address range Business rules: • Uniqueness: Value must be unique among all Blocked VPNs. • Value constraint: Must be a valid IPv4 or IPv6 value.

1 The list of seeded Blocked VPNs can be found here: Seeded Blocked VPNs - Streaming Service

Figure - Promotion Image *⊘*



Promotion Image 🔗

A **Promotion Image** is an image used to promote a Production. This can include stills, screen grabs of the show, posters, and advertisements.

Attributes: Promotion Image

Attribute	Data Type	Requir ed	Details
Value	List< <u>Translat</u> ed Image>	•	The image to be used. Business rules: Translations: There must be a Translated Image for each supported Display Language.
Title	List< <u>Translat</u> ed Text>	•	The Promotion Image's title. Business rules: • Translations: There must be Translated Text for each supported Display Language.

Logline	List< <u>Translat</u>	8	The Promotion Image's <u>logline</u> .
	ed Text>		Business rules:
			• <i>Translations:</i> When a value is set, there <u>must be</u> Translated Text <u>for each</u>
			supported Display Language.

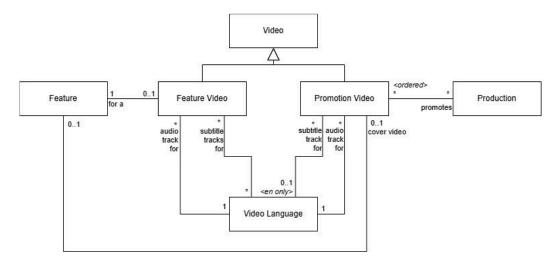
Association: Production – Promotion Image

- A Production is associated with a Promotion Image intended to promote it.
- The set of Promotion Images associated with a Production is <u>ordered</u>. The order indicates how they are presented in a streaming app.

Association constraint: Production – Promotion Image

The set of Promotion Images associated with a Production <u>must be unique</u>; however, the same Promotion Image can be associated with multiple Productions. For example, a single Promotion Image could be related to both a TV Series and an Episode TV Show.

Figure - Video @



Video 🔗

A **Video** is a type of recording that allows a Feature (Film or TV Show) or promotional content (teaser/trailer) to be streamed to a streaming app. For details on the general architecture for how a Video is prepared for streaming and is streamed in the Streaming App, refer to Video transcoding, DRM and streaming.

~	Attributes: Video						
	Attribute	Data Type	Requir ed	Details			
	Location	URL	•	The location of the video file from which it is streamed.			

A Feature Video is a type of Video for a Feature.

→ Attributes: Feature Video

Attribute	Data Type	Requir ed	Details
End Credits Start In Seconds	Non-Negative Integer	•	The location in a Feature Video (specified in seconds) where the end credits start. We want to know this information to discern the point at which we no longer need to maintain a record of the video's playback location to allow the user to continue viewing the Feature Video. See later for details.

Association constraint: Feature – Feature Video

- A Feature <u>must be</u> associated with a Feature Video when the Feature is <u>not expired</u>.
- A Feature <u>must not be</u> associated with a Feature Video when the Feature has <u>expired</u>.

Promotion Video 🖉

A **Promotion Video** is a type of Video created to promote a Production. This can include trailers, teasers, promotional videos (such as interviews with the cast and crew), and advertisements.

→ Attributes: Promotion Video

Attribute	Data Type	Requir ed	Details
Title	List< <u>Translat</u> ed Text>	•	The Promotion Video's title. Business rules: • Translations: There must be Translated Text for each supported Display Language.
Logline	List< <u>Translat</u> ed Text>	8	The Promotion Video's <u>logline</u> . Business rules: Translations: When a value is set, there <u>must be</u> Translated Text <u>for each</u> supported Display Language.
Thumbnail Image	URL	•	The thumbnail image presented to the end-user when the video playback location is zero seconds (the start) and the video is not playing.

Association: Feature – (cover video) Promotion Video

A Feature may optionally be associated with a Promotion Video, prominently used when promoting the Feature. If specified, this Promotion Video <u>becomes the primary recorded means</u> to entice a viewer to learn more about the Production. If no cover video is specified, only the Production's Cover Image will be used when showcasing the Feature in a collection or search results.

Association: Production - Promotion Video

- A Production is associated with a Promotion Video intended to promote it.
- The set of Promotion Videos associated with a Production is <u>ordered</u>. The order indicates the order in which they are presented in the Streaming App.

Association constraint: Production – Promotion Video

The set of Promotion Videos associated with a Production <u>must be unique</u>; however, the same Promotion Video can be associated with multiple Productions. For example, a single Promotion Video could be related to both a TV Series and an Episode TV Show.

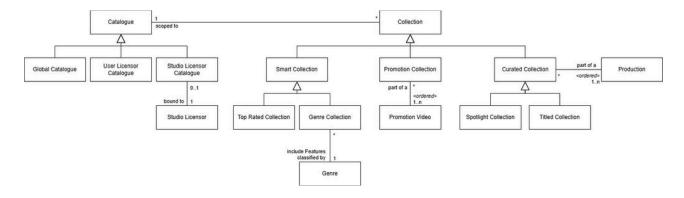
Association constraint: Promotion Video - Video Language

- A Promotion Video plays an audio track in a <u>single</u> Video Language. It <u>does not</u> support multiple Video Languages for its audio tracks.
- A Promotion Video may have at most a single subtitle track Video Language associated with it.
- The subtitle track Video Language associated with a Promotion Video <u>must be</u> English (en).
- A Promotion Video <u>must have</u> an English (en) Video Language subtitle track when its audio track is in a Video Language <u>other</u> <u>than</u> English (en). For example, if the audio track is in Spanish (es), then it must have English (en) subtitles.
- A Promotion Video may optionally have an English (en) subtitle track when its audio track's Video Language is English (en).

Association constraint: Feature Video – Video Language

- A Feature Video plays an audio track in a <u>single</u> Video Language. It <u>does not</u> support multiple Video Languages for its audio tracks.
- A Feature Video may have subtitle tracks in <u>multiple</u> Video Languages.
- A Feature Video <u>must have</u> an English (en) Video Language subtitle track when its audio track is in a Video Language <u>other</u> <u>than</u> English (en). For example, if the audio track is in Spanish (es), then it must have English (en) subtitles.

Figure - Collection @



Catalogue 🔗

A **Catalogue** is the top-level publishing artifact that enumerates, organizes, and exposes one or more collections. It represents which Productions can be browsed under a particular context.

Global Catalogue 🔗

A **Global Catalogue** is a type of Catalogue for organizing collections made of any Production <u>regardless of who licenses it</u>. By definition, <u>only one</u> Global Catalogue exists, and it is <u>seeded</u> with the system.

User Licensor Catalogue 🔗

A **User Licensor Catalogue** is a type of Catalogue for organizing collections made of Productions <u>licensed by all</u> User Licensors. It provides a means for highlighting content licensed by individuals. By definition, <u>only one</u> User Licensor Catalogue exists, and it is <u>seeded</u> with the system.

Studio Licensor Catalogue 🔗

A **Studio Licensor Catalogue** is a type of Catalogue for organizing collections made of Productions <u>licensed by a particular</u> Studio Licensor.

Collection &

A **Collection** is a group of Productions or Promotion Videos organized under a particular theme or genre. Only Collections with one or more Productions or Promotion Videos are presented to viewers.

Association: Catalogue - Collection

- The Productions grouped in a Collection are scoped based on the rules established by the associated Catalogue.
- Only a Catalogue with one or more Collections that contain one or more Productions or Promotion Videos is presented to viewers.

Curated Collection @

A **Curated Collection** is a type of Collection that a curator has manually curated with <u>Productions</u>. For example, in October, a curator may curate a collection of Halloween-themed Productions.

Association: Curated Collection – Production

Conveys the set of Productions associated with a Curated Collection.

Association constraint: Curated Collection – Production

- A Curated Collection may contain Film Series, Films, TV Series, Season, Standalone TV Show, or Episode TV Show. It is up to the curator not to mix Productions in a Collection in a confusing manner.
- A Production can only be associated with a Curated Collection when its acquisition period has not ended.

Spotlight Collection @

A **Spotlight Collection** is a type of Curated Collection that is used to prominently highlight (shine the spotlight on) a particular set of Productions for viewers.

Constraint: Spotlight Collection

There can only be one Spotlight Collection per Catalogue.

Titled Collection @

A Titled Collection is a type of Curated Collection created by a curator and assigned a user-defined title.

 Attributes: Titled Collection **Attribute Data Type** Requi **Details** red Title List<<u>Translate</u> The Collection's Title. For example, the "Coppola's Favorites", "Halloween", "Award Winning"... d Text> **Business rules:** • Translations: There <u>must be</u> Translated Text <u>for each</u> supported Display Language. • Uniqueness: The Title value must be unique within each Display Language across all Titled Collections associated with the Catalogue.

Smart Collection @

A Smart Collection is a type of Collection with a pre-defined rule that the system uses to evaluate a set of Features.

Top Rated Collection ${\mathscr O}$

A **Top Rated Collection** is a type of Smart Collection that groups Features associated with the most highly evaluated features (see later for details).

Runtime behaviour: Top Rated Collection

- A Feature can only be associated with a Top Rated Collection when its acquisition period has not ended.
- TBD need to specify the rule for selecting Features based on their evaluation.

Constraint: Top Rated Collection

- There is only one Top Rated Collection per Catalogue.
- A Top Rated Collection is seeded with a Catalogue.

Genre Collection 🔗

A **Genre Collection** is a type of Smart Collection that groups Features associated with a particular Genre. By definition, a Genre's title is a translated display value of the Genre.

Association: Genre Collection - Genre

The Genre associated with a Genre Collection conveys which Features to associate with the Genre Collection.

Association constraint: Genre Collection - Genre

There is only <u>one</u> Genre Collection for a particular Genre per Catalogue. For example, a Catalogue <u>cannot</u> have two *Comedy* Genre Collections.

Runtime behaviour: Genre Collection

- A Feature can only be associated with a Genre Collection when its acquisition period has not ended.
- Sorting Genre Collections:
 - By default, sort the set of Genre Collections alphabetically by its translated Genre title.
 - When a Profile is associated with a set of preferred Genres, then prioritize presenting those Genre Collections first (alphabetically) before showing Genre Collections associated with non-preferred Genres (alphabetically).
- Sorting Features within a Genre Collection: Those Features that align with a particular Genre first are grouped first within the associated Genre Collection. Those Features that align with a particular Genre second are grouped second, and so on. Within each group, the Features are sorted alphabetically by their translated Title.

Promotion Collection @

A **Promotion Collection** is a type of Collection that a curator has manually curated with <u>Promotion Videos</u>. A Promotion Collection allows a viewer to quickly scan Promotion Videos to better discover the Feature they wish to view.

Constraint: Promotion Collection

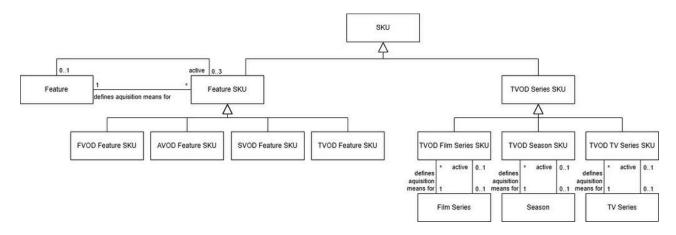
At most, there is only one Promotion Collection per Catalogue.

Association constraint: Promotion Collection - Promotion Video

- The Promotion Videos associated with a Promotion Collection <u>must come</u> from a <u>unique set</u> of Productions. A Promotion Collection <u>must not</u> show two different Promotion Videos for the same Production.
- A Promotion Video <u>can only</u> be associated with a Promotion Collection when the associated Production acquisition period has <u>not ended</u>.

TBD - what should we do when a Profile has already viewed a Feature? Should we filter them out of the Collection or sort them further down the list?

Figure - SKU @



🚺 Video on demand (VOD) delivery mechanisms

The SKU allows DCP+ to provide viewers with a variety of means of <u>acquiring</u> a video to view it. First, I would like to share which VOD delivery mechanisms DCP+ will support.

- FVOD (Free Video on Demand) Content is free. Viewers are not required to purchase, subscribe to, or watch ads. It could be used with episodic content, where a viewer can view the first episode for free, allowing them to sample the series without forcing them to purchase it.
- AVOD (Advertising-Based Video on Demand) Content is funded by advertising, with viewers seeing ads in exchange for access.
- SVOD (Subscription Video on Demand) Users pay a monthly fee to access a library of ad-free content.
- TVOD (Transactional Video on Demand) Users pay a one-time fee to rent or purchase specific ad-free content.

SKU 🔗

A **SKU** (Stock Keeping Unit) is used to identify and track Feature inventory and provide the means by which a viewer <u>acquires the right</u> to view a Production. A SKU's lifecycle goes <u>from active to inactive but never back to active</u>. During its active lifecycle, a viewer may use it to <u>acquire</u> a particular Production if its <u>acquisition period has not ended</u>. During its inactive lifecycle, it <u>cannot be used to acquire a Production</u>. Once created, a SKU can <u>never be deleted</u> as it records all inventory (Productions) acquired via the SKU.

→ Attributes: SKU

Attribute	Data Type	Requi red	Details
Code	Alphanu meric	•	A unique value used to uniquely identify a SKU. Business rules: • Uniqueness: Value must be globally unique.
Activated On	DateTime	•	The timestamp at which a SKU became active. Business rules: • Uniqueness: The value must be unique among all SKUs of a given SKU type associated with a particular Production. • Immutability: Once set, the value can never be changed.
Deactivated On	DateTime	8	The timestamp at which a SKU became inactive. Business rules: • Value constraint: Non-null value must be greater than Activated On.

• Immutability: Once set, the value can never be changed.

Constraint: SKU

Once created, a SKU can never be deleted.

Feature SKU 🔗

A **Feature SKU** is a type of SKU for a viewer to acquire the rights to view a Feature.

FVOD Feature SKU 🔗

An **FVOD Feature SKU** is a type of Feature SKU that makes a Feature available to viewers for free and ad-free. An FVOD Feature SKU provides support for FVOD.

AVOD Feature SKU 🔗

An **AVOD Feature SKU** is a type of Feature SKU that makes a Feature available to viewers for free in exchange for periodically being shown advertisements during their viewing. An AVOD Feature SKU provides support for AVOD.

SVOD Feature SKU 🔗

An **SVOD Feature SKU** is a type of Feature SKU that makes a Feature available to viewers, ad-free, who have purchased a DCP+ subscription. An SVOD Feature SKU provides support for SVOD.

TVOD Feature SKU 🔗

A **TVOD Feature SKU** is a type of Feature SKU that makes a Feature available to viewers, ad-free, when they pay the <u>purchase or rental</u> price. A TVOD Feature SKU provides support for TVOD.

→ Attributes: TVOD Feature SKU

Attribute	Data Type	Requi red	Details
Purchase Price In USD	Float	•	The purchase price in USD for the Feature. Business rules: • Immutable: Once set, the value can never change.
Rental Price In USD	Float	•	The rental price in USD for the Feature. Business rules: Immutable: Once set, the value can never change.

Association: Feature – Feature SKU

- Defines acquisition means for: The set of Feature SKUs associated with a Feature conveys the total set of <u>active and inactive</u> Feature SKUs established for a Feature.
- Active: Defines the Feature SKUs that are <u>currently</u> active for a Feature. A Feature <u>can only</u> be acquired through an active Feature SKU.

Association constraint: Feature - (active) Feature SKU

- A Feature <u>may only</u> have an *active* association with a Feature SKU when the Feature's acquisition period <u>has not</u> ended, and the Feature SKU <u>is not</u> deactivated.
- A Feature whose acquisition period <u>has not</u> ended <u>must be</u> associated with at least one active Feature SKU so that a viewer has a means for acquiring it.
 - When a Feature <u>is not associated</u> with an active FVOD Feature SKU, it <u>must be</u> associated with an active AVOD Feature SKU, SVOD Feature SKU, TVOD Feature SKU or some unique combination of the three.
 - When a Feature <u>is associated</u> with an active FVOD Feature SKU, it <u>must not</u> be associated with any other kind of active
 Feature SKU. There is no value in providing a Feature for free and making it available through ads, subscription, purchase,
 or rental.
- When a Feature is associated with a series, such as a Film in a Film Series or an Episode TV Show,
 - Only the first Feature in the series can be associated with an active FVOD Feature SKU.
 - A Feature can only be associated with an active TVOD Feature SKU when all other Features within the Series are
 associated with an active TVOD Feature SKU, except when the <u>first</u> Feature is associated with an active FVOD Feature SKU.
 - A Feature can only be associated with an *active* SVOD Feature SKU when all other Features within the Series are associated with an *active* SVOD Feature SKU, except when the <u>first</u> Feature is associated with an *active* FVOD Feature SKU.
 - A Feature can only be associated with an active AVOD Feature SKU when all other Features within the Series are
 associated with an active AVOD Feature SKU, except when the first Feature is associated with an active FVOD Feature SKU.

Feature acquisition rules: Feature – FVOD Feature SKU

To acquire a Feature through an FVOD Feature SKU,

- The Feature must have an active association with an FVOD Feature SKU and,
- The individual acquiring the Feature may do so anonymously within the context of an <u>anonymous profile</u> (see later for details) or may do so signed in within the context of a <u>viewer account</u> (see later for details).
 - **Note:** We decided to allow for anonymous viewing of free content to provide <u>risk-free exploration</u> to people new to the Streaming App without forcing them to commit to creating a viewer account and signing in.

Feature acquisition rules: Feature – AVOD Feature SKU

To acquire a Feature through an AVOD Feature SKU,

- The Feature must have an active association with an AVOD Feature SKU and,
- The individual acquiring the Feature may do so anonymously within the context of an <u>anonymous profile</u> or may do so signed in within the context of a <u>viewer account</u>.
 - Note: Like FVOD, anonymous viewing grants end-users <u>risk-free exploration</u>. Additionally, from a monetary standpoint, allowing someone to anonymously view advertised content will enable us to maximize advertisement revenue, as we are not expecting someone to go through the friction of account creation or sign-in.

Feature acquisition rules: Feature – SVOD Feature SKU

To acquire a Feature through an SVOD Feature SKU,

- The Feature must have an active association with an SVOD Feature SKU and,
- The individual acquiring the Feature must be signed in within the context of a viewer account and,
- The individual must have bought a subscription, and the subscription must be active (see later for details).

Feature acquisition rules: Feature – TVOD Feature SKU

- To acquire a Feature through a TVOD Feature SKU,
 - The Feature must have an active association with a TVOD Feature SKU and,
 - The individual acquiring the Feature must be signed in within the context of a viewer account and,
 - The individual must have paid the purchase or rental price specified by the TVOD Feature SKU (see later for details).
- When a viewer has <u>purchased</u> a Feature via a TVOD Feature SKU, they have bought the rights to view that Feature <u>forever</u>, unless the Feature <u>expires</u>.
- When a viewer has <u>rented</u> a Feature via a TVOD Feature SKU, they have bought the rights to view that Feature for the <u>length of</u> <u>the rental window</u> (see later for details), unless the Feature <u>expires</u> before the rental window ends.

TVOD Series SKU 🔗

A **TVOD Series SKU** is a type of SKU that makes the Features associated with a Film Series, TV Series, or Season available to viewers, ad-free, when they pay the <u>purchase</u> price.

Attributes: TVOD Series SKU

Attribute	Data Type	Requi red	Details
Price In USD	Float	•	The price in USD set for the series Business rules: • Immutable: Once set, the value can never change.

TVOD Film Series SKU 🔗

A TVOD Film Series SKU is a type of TVOD Series SKU for setting the purchase price of a Film Series individually.

Association constraint: Film Series - (active) TVOD Film Series SKU

A Film Series may only have an active association with a TVOD Film Series SKU,

- When the Film Series' acquisition period has not ended, and the TVOD Film Series SKU is not deactivated.
- When <u>all Films</u> within that Film Series are <u>individually</u> associated with an <u>active</u> TVOD Feature SKU, or when the <u>first</u> Film in the Film Series is associated with an *active* FVOD Feature SKU and all other Films are associated with an *active* TVOD Feature SKU.
- When the total TVOD Feature SKU price of all Films in the Film Series is greater than the TVOD Series SKU. The Film Series purchase price should be <u>less</u> than buying the Films individually.

TVOD Season SKU 🔗

A TVOD Season SKU is a type of TVOD Series SKU for setting the purchase price of a Season individually.

Association constraint: Season - (active) TVOD Season SKU

A Season may only have an active association with a TVOD Season SKU,

- When the Season's acquisition period has not ended, and the TVOD Season SKU is not deactivated.
- When <u>all Episode TV Shows</u> within that Season are <u>individually</u> associated with an <u>active</u> TVOD Feature SKU, or when the <u>first</u> Episode TV Show in the Season is associated with an <u>active</u> FVOD Feature SKU and all other Episode TV Shows are associated with an <u>active</u> TVOD Feature SKU.
- When the total TVOD Feature SKU price of all Episode TV Shows with the Season is greater than the TVOD Season SKU. The Season purchase price should be <u>less</u> than buying the Episode TV Shows individually.

TVOD TV Series SKU 🔗

A TVOD TV Series SKU is a type of TVOD Series SKU for setting the purchase price of a TV Series individually.

Association constraint: TV Series - (active) TVOD TV Series SKU

A TV Series may only have an active association with a TVOD TV Series SKU,

- When the TV Series' acquisition period has not ended, and the TVOD Film Series SKU is not deactivated.
- When the TV Series is made up of Episode TV Shows
 - When <u>all Episode TV Shows</u> within that TV Series are <u>individually</u> associated with an <u>active</u> TVOD Feature SKU, or when the
 <u>first</u> Episode TV Show in the TV Series is associated with an <u>active</u> FVOD Feature SKU and all other Episode TV Shows are
 associated with an <u>active</u> TVOD Feature SKU.
 - When the total TVOD Feature SKU price of all Episode TV Shows with the TV Series is greater than the TVOD TV Series
 SKU. The TV Series purchase price should be <u>less</u> than buying the Episode TV Shows individually.
- When the TV Series is made up of Seasons
 - When all Seasons within that TV Series are individually associated with an active TVOD Season SKU.
 - When the total TVOD Season SKU price of all Seasons with the TV Series is greater than the TVOD TV Series SKU. The TV Series purchase price should be <u>less</u> than buying the Seasons individually.

Feature acquisition rules: Film Series - TVOD Film Series SKU

- To acquire a Film Series through a TVOD Film Series SKU,
 - The Film Series must have an active association with a TVOD Film Series SKU and,
 - The individual acquiring the Film Series must be signed in within the context of a viewer account (see later for details) and,
 - The individual must have paid the purchase price specified by the TVOD Film Series SKU (see later for details).
- When a viewer has <u>purchased</u> a Film Series via a TVOD Film Series SKU, they have bought the rights to view all Features associated with it <u>forever</u>, unless the Film expires.

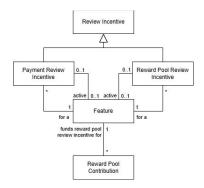
Feature acquisition rules: Season - TVOD Season SKU

- To acquire a Season through a TVOD Season SKU,
 - The Season must have an active association with a TVOD Season SKU and.
 - The individual acquiring the Season must be signed in within the context of a viewer account and,
 - The individual must have paid the purchase price specified by the TVOD Season SKU.
- When a viewer has <u>purchased</u> a Season via a TVOD Season SKU, they have bought the rights to view <u>all</u> Episode TV Shows associated with it <u>forever</u>, unless the Episode TV Show expires.

Feature acquisition rules: TV Series – TVOD TV Series SKU

- To acquire a TV Series through a TVOD TV Series SKU,
 - The TV Series must have an active association with a TVOD TV Series SKU and,
 - The individual acquiring the TV Series must be signed in within the context of a viewer account and,
 - The individual must have paid the purchase price specified by the TVOD TV Series SKU.
- When a viewer has <u>purchased</u> a TV Series via a TVOD TV Series SKU, they have bought the rights to view <u>all descendant</u> Episode TV Shows associated with it <u>forever</u>, unless the Episode TV Show expires.

Figure - Review Incentive @



Review Incentive 🔗

A **Review Incentive** provides a means for a Licensor to offer a person who views a Feature to write a review within the allotted review period in exchange for a monetary reward. This practice can encourage more customers to share their viewing experience to benefit members of the DCP+ community and the Licensor. A Review Incentive's lifecycle goes from active to inactive, but never back to active. During its active lifecycle, it can be used to incentivize a person to write a review. During its inactive lifecycle, it cannot be used to incentivize a person to write a review. Once created, a Review Incentive can never be deleted as it records all awards paid from it.

Attribute	Data Type	Requi red	Details
Activated On	DateTime	•	The timestamp at which a Review Incentive became active. Business rules: • Uniqueness: The value must be unique among all Review Incentives (of a given type) associated with a particular Feature. • Immutability: Once set, the value can never be changed.
Deactivated On	DateTime	€	The timestamp at which a Review Incentive became inactive. Business rules: Required: When no value is set, it implies the Review Incentive is activated. When a value is set, it means the Review Incentive is deactivated. Value constraint: Non-null value must be greater than Activated On Uniqueness: The value (including null values) must be unique among all Review Incentives (of a given type) associated with a particular Feature.

• Immutability: Once set, the value can never be changed.

Constraint: Review Incentive

Once created, it can never be deleted. The reason is that we want to keep a record of the Review Incentive from which a review award is issued.

Review award payout eligibility: Review Incentive

For a person to be eligible to receive a reward for writing a review, the following conditions must be met.

- The Feature is associated with a Review Incentive that aligns with how the person acquires the Feature (see below).
- The person who viewed the Feature did so in the context of a viewer account. The person can't view the Feature anonymously.
- The viewer submits a candidate review within the allotted review period.
 - The review period starts when the viewer <u>begins</u> viewing a Feature.
 - The review period is 7 days (168 hours)
- A moderator approves the candidate review.
 - **Note:** If a moderator denies the candidate review, the viewer can make edits and submit it again. They must resubmit their candidate review within the review period to be eligible.

For details on reviews, moderation, and awards, refer to Figure - Evaluated Feature

Payment Review Incentive @

A **Payment Review Incentive** is a type of Review Incentive that is available to a viewer when they acquire a Feature by directly paying for it, either through a TVOD Feature SKU or a TVOD Series SKU. An award amount is specified as a percentage of the amount paid by a viewer to acquire the Feature.

Attributes: Payment Review Incentive

Attribute	Data Type	Requi red	Details
Award Percentage	Float	•	The award amount is specified as a percentage of the amount paid by the viewer to acquire the Feature. For example, if the Award Percentage is set to 10% and the viewer purchased the Feature for \$10, the award amount is \$1. Business rules: • Minimum value: 0.5 • Maximum value: 100 • Immutability: Once set, the value can never be changed.

Association: Feature – Payment Review Incentive

• Incentive for viewer to review: The set of Payment Review Incentives associated with a Feature conveys the total set of activated and deactivated Payment Review Incentives established for a Feature.

• Active: A Feature is associated with at most <u>one active</u> Payment Review Incentive. Without an active Payment Review Incentive, a viewer will not be incentivized to write a review.

Association constraint: Feature – (active) Payment Review Incentive

Only a non-deactivated Payment Review Incentive can be assigned as a Feature's active Payment Review Incentive.

Calculating Award Percentage: Payment Review Incentive

- The viewer <u>purchased</u> a Feature via a TVOD Feature SKU: TVODFeatureSKU.PurchasePriceInUSD *
 PaymentReviewIncentive.AwardPercentage
- The viewer <u>rented</u> a Feature via a TVOD Feature SKU: TV0DFeatureSKU.RentalPriceInUSD *
 PaymentReviewIncentive.AwardPercentage
- The viewer <u>purchased</u> a Feature as part of a Film Series, TV Series, or Season: (TV0DSeriesSKU.PriceInUSD * PaymentReviewIncentive.AwardPercentage) / total number of Features associated with the series
 - \circ For example, assume a TV Series purchased for \$45 has three Seasons, and each Season has ten Episode TV Shows, and the Award Percentage is 10%, then the reward for writing a review would be (45 * .1) / 30 = \$0.15.

Reward Pool Review Incentive 🔗

A **Reward Pool Review Incentive** is a type of Review Incentive that is available to a viewer when they acquire a Feature, either through an AVOD Feature SKU or an SVOD Feature SKU. The review incentive is a set amount that is paid out from a reward pool funded by the Licensor for as long as the reward pool has sufficient funds.

Attributes: Reward Pool Review Incentive

Business rules:
Minimum value: 0.5
Required:
When the Award Method is set to Percentage, Award Percentage <u>must have</u>
a value.
When the Award Method is set to Specified, Award Percentage <u>must not</u>
<u>have</u> a value.
• Immutability: Once set, the value can never be changed.

Association: Feature – Reward Pool Review Incentive

- Incentive for viewer to review: The set of Reward Pool Review Incentives associated with a Feature conveys the total set of active and inactive Reward Pool Review Incentives established for a Feature.
- Active: A Feature is associated with at most <u>one active</u> Reward Pool Review Incentive. Without an active Payment Review Incentive, the viewer will not be incentivized to write a review.

Association constraint: Feature – (active) Reward Pool Review Incentive

- Only an <u>activated</u> Reward Pool Review Incentive can be assigned as a Feature's <u>active</u> Reward Pool Review Incentive. (Reward Pool Review Incentive's <u>Deactivated On attribute must be set to null)</u>.
- When an <u>activated</u> Reward Pool Review Incentive's *Award Method* is set to Specified, it <u>can only</u> be assigned as a Feature's <u>active</u> Reward Pool Review Incentive when the reward pool's balance <u>exceeds</u> the Reward Pool Review Incentive's *Award Amount In USD* attribute. Once the reward pool balance drops below the *Award Amount In USD*, the Reward Pool Review Incentive can no longer be used as a review incentive, as there will be insufficient funds to pay out an award.

Reward Pool @

A Reward Pool is a collection of funds that a Reward Pool Review Incentive pays out from as a review award.

Attribute

Data
Type
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A record of the amount that is currently available to be awarded. Each time an amount is awarded to an individual for writing a review, the amount is debited from the Balance In USD.

Reward Pool Contribution 🔗

A **Reward Pool Contribution** is the means for funding a Reward Pool. The Licensor is responsible for funding the Reward Pool using their own money. A Licensor may top a Reward Pool at any time by submitting a Reward Pool Contribution.

Attribute Data Requi Type red Details

Contributed On	DateTime	•	The timestamp of the contribution.
Contribution Amount In USD	Float	•	A record of the amount that was contributed to the associated Reward Pool.

Association: Reward Pool – Reward Pool Contribution

The lifetime total balance of a Reward Pool is the sum total of all associated Reward Pool Contributions.

Information Model - Streaming Service - Part 2 @

This is the end of Part 1 of the Streaming Service information model. It has been broken across multiple pages for performance reasons. Having all of the content on one page was hogging browsers resources. Refer to <u>Information Model - Streaming Service - Part 2</u> for the rest of the information model.