# The Roku Channel Feed Specification, v2.9.1

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### Overview

This specification describes the feed required for your channel's content catalog to be included in The Roku Channel. A catalog is the set of movies, series, TV specials, short-form videos or linear stream your channel provides, along with the artwork that represents it in the UI. A catalog feed includes the metadata that describes each asset so Roku can index it, identify its streaming URL, categorize it, and present it to users.

The Roku Channel feed format follows the JSON-Schema Draft 4. All the properties in the schema are case sensitive. Before submitting a feed, make sure it is a valid JSON file. You can do that by using an IDE or free online tools, such as JSON Schema Validator or JSON Schema Lint.

For guidelines about presenting your channel, see Content Specification.

### Inclusion in The Roku Channel

In order for your content to be surfaced in The Roku Channel, you must adhere to this specification. If you already have a channel powered by Direct Publisher and you want its content to appear in The Roku Channel, you must ensure your feed meets the requirements described in this specification. Likewise, if you've built a channel using our developer program, then you must provide Roku with a separate feed adhering to this specification. The new feed must contain only assets that are available for display in The Roku Channel.



Note that participation in The Roku Channel is currently limited to select partners. Configuring your feed to meet this specification is a prerequisite to be reviewed for inclusion. To submit a feed for approval into The Roku Channel, contact your Roku representative.

### Direct Publisher Feed Schema

These are the properties for the root object of your feed. It contains basic information such as your company's name, when the feed was last updated, and other objects that will describe all your content in detail. The URL for your feed should have the form "https://yourfeeddomain.com".

The format of the feed is a comma-separated list with each property enclosed in double quotes. You must assign each asset (object) its own reference ID, which is a string. **Note**: The ID for an asset must not exceed 50 characters.

Field/Root Property	Content Type	Required	Description	
providerName	string	Required	The name of the feed provider. For instance, "Acme Productions" as shown in the template below.	
lastUpdated	string	Required	The date that the feed was last modified in the ISO 8601 format: {YYYY}-{MM}-{DD}T{hh}:{mm}:{ss}+{TZ}. For instance, "2015-11-11T22:21:37+00:00" as shown in the template below.	
language	string	Required	The language the channel uses for all its information and descriptions in an ISO 639 alpha-2 or alpha-3 language code string. For instance, "en-US" as shown in the template below.	
movies	Movie Object	Required*	A list of one or more movies.	
series	Series Object	Required*	A list of one or more series. Series are episodic in nature and would include TV shows and daily or weekly ongoing shows.	
shortFormVide os	ShortFormVide o Object	Required*	A list of one or more short-form videos. Short-form videos are usually less than 20 minutes long and are not TV shows or movies.	
tvSpecials	TV Special Object	Required*	A list of one or more TV specials. TV specials are one-time TV programs that are not part of a series.	
liveFeeds	LiveFeed Object	Required*	A list of one or more live linear streams.	

<sup>\*</sup>At least one of these content types is required

The Roku Channel Feed Root Object Template:

```
{ "providerName": "Acme Productions", "lastUpdated": "2015-11-11T22:21:37+00:00", "language": "en-US", "categories": [ ... ], "playlists": [ ... ], "movies": [ ... ], "series": [ ... ], "shortFormVideos": [ ... ], "tvSpecials": [ ... ], "liveFeeds": [ ... ]
```

### Artwork for All Content

For each piece of content Roku supports three types of artwork: key art, background art, and box cover. Each image type will be used in a different location within the Roku Channel.

Each image must be delivered in the JPEG format (.jpg file extension).

Roku prefers to receive all art sizes whenever possible. All three image types are preferred. At a minimum, for a movie and a series Roku requires key art or box cover.

Image Type	Description	Resolution	Aspect Ratio	Required/Optional
key art	Image with title treatment	1920x1080	16:9	<ul><li>Movie: Required</li><li>Series: Required</li></ul>
background	Textless image used in background of program page	1920x1080	16:9	Movie: Optional     Series: Optional
box cover	Vertical poster image with title treatment	2000x3000	2:3	Movie: Optional     Series: Optional

### **Artwork Content Guidelines**

- Key art (graphic with the full title of the asset visible)
- No sexually explicit or graphically violent artwork
- Artwork should be post-theatrical and not include language such as "In Theaters Now" or "Coming Soon"
- Artwork designed specifically for digital delivery is preferred
- Artwork for international territories should be localized for each territory

Object Example:

<sup>\*\*</sup>For content on TRC, Roku will not accept branded artwork without prior approval for any individual video asset nor for season/series entities.

```
thumbnail: "http://thumbnail.jpg",
thumbnail Boxcover: \ "http://thumbnail Boxcover.jpg",\\
backgroundImage: "http://backgroundImage.jpg"
```

# **Content Types**

### movie Content Type

Child object of root property movies.

This object represents a movie.

### **Movie Ad Policy**

- No adBreaks should be listed during the first 10 minutes of playback
   No pre-roll adBreak should be listed 00:00:00
   adBreak cue points should be provided at naturally occurring scene breaks and/or fades to black
   There should be no less than 10 minutes between each adBreak
- · No adBreaks within 10 minutes of end credits.

Field	Туре	Required	Description	
id	string	Required	Your immutable string reference ID for the movie. THIS CANNOT CHANGE. This should serve as a unique identifier for the movie across different locales.	
			Note: The ID for an asset must not exceed 50 characters.	
title	string	Required	Movie title. Roku uses this value for matching in Roku Search. Please use plain text and don't include extra information like year, version label, etc.	
content	Content Object	Required	The actual video content, such as the URL of the video file, subtitles, etc.	
genres	string	Required	The genre(s) of the movie. Must be one of the values listed in genres.	
thumbn ail	string	Required	The URL of the thumbnail for the movie. This is used within your channel and in search results. Image dimensions must be at least 800x450 (width x height, 16x9 aspect ratio).	
			Landscape key art and portrait box cover graphics with the full title of the asset visible in a JPEG file. Image dimensions should be 1920x1080 preferred (width x height, 16x9 aspect ratio) for landscape key art and 532px by 800px preferred (width x height, 2x3 aspect ratio) for portrait box cover.	
release Date	string	Required	The date the movie was initially released or first aired. Used to sort programs chronologically and grouping related content in Roku Search. Conforms to the ISO 8601 format: {YYYY}-{MM}-{DD}. E.g.: 2015-11-11	
shortDe scription	string	Required	A movie description that does not exceed 200 characters. The text will be clipped if longer.	
longDe scription	string	Required	A longer movie description that does not exceed 500 characters. The text will be clipped if longer. Must be different from shortDescription.	
tags	string	Optional	One or more tags (e.g., "dramas", "korean", etc.). Each tag is a string and is limited to 20 characters. Tags are used to define what content will be shown within a category.	
credits	Credit Object	Optional	*See Kids-Directed content for tag requirements  One or more credits. The cast and crew of the movie.	
rating	Rating	Required	A parental rating for the content.	
	Object		*See Kids-Directed content for rating requirements	
external lds	Externa I IDs Object	Optional	One or more third-party metadata provider IDs.	

#### Movie Object Example:

```
{ "id": "1509428502952", "title": "Sample Movie", "content": { ... }, "genres": [ "drama", "comedy", "horror" ], "thumbnail": "https://example.org/cdn/thumbnails/1509428502952/1", "releaseDate": "2016-01-01", "shortDescription": "Incredible movie description", "longDescription": "Even more incredible and longer movie description", "tags": [ "amazing", "drama", "comedy", "horror" ] }
```

### series Content Type

Child object of root property series.

This object represents a series, such as a season of a TV show or a mini-series.

Field	Туре	Required	Description	
id	string	Required	Your immutable string reference ID for the series. THIS CANNOT CHANGE. This should serve as a unique identifier for the movie across different locales.	
			Note: The ID for an asset must not exceed 50 characters.	
title	string	Required	The title of the series. Roku uses this field for matching in Roku Search.	
seasons	Season Object	Required*	One or more seasons of the series. Seasons should be used if episodes are grouped by seasons.	
episodes	Episode Object	Required*	One or more episodes of the series. Episodes should be used if they are not grouped by seasons (e.g., a mini-series).	
genres	string	Required	The genre(s) of the series. Must be one of the values listed in genres.	
thumbn ail	string	Required	The URL of the thumbnail for the series. This is used within your channel and in search results. Image dimensions must be at least 800x450 (width x height, 16x9 aspect ratio).	
			Landscape key art and portrait box cover graphics with the full title of the asset visible in a JPEG file. Image dimensions should be 1920x1080 preferred (width x height, 16x9 aspect ratio) for landscape key art and 532px by 800px preferred (width x height, 2x3 aspect ratio) for portrait box cover.	
release Date	string	Required	The date the series first aired. Used to sort programs chronologically and grouping related content in Roku Search. Conforms to the IS O 8601 format: {YYYY}-{MM}-{DD}. E.g.: 2015-11-11	
shortDe scription	string	Required	A description of the series that does not exceed 200 characters. The text will be clipped if longer.	
longDe scription	string	Required	A longer movie description that does not exceed 500 characters. The text will be clipped if longer. Must be different from shortDescription.	
tags	string	Optional	One or more tags (e.g., "dramas", "korean", etc.). Each tag is a string and is limited to 20 characters. Tags are used to define what content will be shown within a category.	
rating	Rating	Required	*See Kids-Directed content for tag requirements  A parental rating for the content.	
-	Object		*See Kids-Directed content for rating requirements	
credits	Credit Object	Optional	One or more credits. The cast and crew of the series.	
external lds	Externa I IDs Object	Optional	One or more third-party metadata provider IDs.	

<sup>\*</sup>Must have either seasons or episodes

#### Series Object Example (seasons):

```
{ "id": "1509428502952", "title": "The Amazing Series with Seasons!", "seasons": [ ... ], "genres": [ "educational", "science fiction", "thriller", ], "thumbnail": "https://example.org/cdn/thumbnails/1509428502952/1", "shortDescription": "Wondrous series seasons." }
```

#### Series Object Example (mini-series):

```
{ "id": "1509428502952", "title": "The Amazing Series with Episodes Only!", "episodes": [ ... ], "genres": [ "fash ion", "romance", "technology", ], "thumbnail": "https://example.org/cdn/thumbnails/1509428502952/1", "shortDescrip tion": "Unbelievables series episodes." }
```

Child object of property series -> seasons.

This object represents a single season of a series.

Field	Туре	Required	Description
seasonNumber	seasonNumber integer		Sequential season number. e.g.: 3 or 2015.
episodes	Episode Object	Required	One or more episodes of this particular season.

Season Object Example:

{ "seasonNumber": 1, "episodes": [ ... ] }

### episode Content Type

Child object of property:

- series -> episodes
- series -> seasons -> episodes

This object represents a single episode in a series or a season.

#### **Episode Ad Policy**

Content length longer than 12 minutes:

- No adBreaks should be listed during the first 5 mins of playback
  No pre-roll adBreak should be listed 00:00:00
  adBreak cue points should be provided at naturally occurring scene breaks and/or fades to black
- There should be no less than 7 mins between each adBreak
- No adBreaks within the last 5 minutes of end credits

Content length less than 12 minutes:

- Please leave this filed blank
  Content less than 12 minutes with no adBreaks listed will automatically receive a single pre-roll ad

Field	Туре	Required	Description	
id	string	Required	Your immutable string reference ID for the episode. THIS CANNOT CHANGE. This should serve as a unique identifier for the movie across different locales.	
			Note: The ID for an asset must not exceed 50 characters.	
title	string	Required	Episode title. Roku uses this value for matching in Roku Search. Please don't include extra information like year, version label, etc.	
content	Content Object	Required	The actual video content, such as the URL of the video file, subtitles, etc.	
thumbn ail	string	Required	The URL of the thumbnail for the episode. This is used within your channel and in search results. Image dimensions must be at least 800x450 (width x height, 16x9 aspect ratio).	
			Landscape key art and portrait box cover graphics with the full title of the asset visible in a JPEG file. Image dimensions must be 1920x1080 (width x height, 16x9 aspect ratio) for landscape key art and 532px by 800px (width x height, 2x3 aspect ratio) for portrait box cover.	
release Date	string	Required	The date the episode first aired. Used to match program data to Gracenote counterpart. Conforms to the ISO 8601 format: {YYYY}-{MM}-{DD}. E.g.: 2015-11-11	
episode Number	integer	Required	Sequential episode number. e.g.: 3	
shortDe scription	string	Required	An episode description that does not exceed 200 characters. The text will be clipped if longer.	
longDe scription	string	Required	A longer episode description that does not exceed 500 characters. The text will be clipped if longer. Must be different from shortDescription.	
credits	Credit Object	Optional	One or more credits. The cast and crew of the episode.	
tags	string	Optional	One or more tags (e.g., "dramas", "korean", etc.). Each tag is a string and is limited to 20 characters. Tags are used to define what content will be shown within a category.	
			*See Kids-Directed content for tag requirements	

rating	Rating Object	Required	A parental rating for the content.  *See Kids-Directed content for rating requirements
external lds	External IDs Property	Optional	One or more third-party metadata provider IDs.

#### Episode Object Example:

```
{ "id": "1509428502952", "title": "The Amazing First Episode Title", "content": { ... }, "thumbnail": "https://exa mple.org/cdn/thumbnails/1509428502952/1", "episodeNumber": 1, "shortDescription": "Marvelous episode description" }
```

### shortFormVideo Content Type

Child object of root property shortFormVideos.

Short-form videos are generally less than 12 minutes long, and are not TV Shows or Movies.

Field	Туре	Required	Description	
id	string	Required	Your immutable string reference ID for the video. THIS CANNOT CHANGE. This should serve as a unique identifier for the movie across different locales.	
			Note: The ID for an asset must not exceed 50 characters.	
title	string	Required	Video title. Roku uses this value for matching in Roku Search. Please don't include extra information like year, version label, etc.	
content	Content Object	Required	The actual video content, such as the URL of the video file, subtitles, etc.	
thumbn ail	string	Required	The URL of the thumbnail for the video. This is used within your channel and in search results. Image dimensions must be at least 800x450 (width x height, 16x9 aspect ratio).	
			Landscape key art and portrait box cover graphics with the full title of the asset visible in a JPEG file. Image dimensions must be 1920x1080 (width x height, 16x9 aspect ratio) for landscape key art and 532px by 800px (width x height, 2x3 aspect ratio) for portrait box cover.	
shortDe scription	string	Required	A description of the video that does not exceed 200 characters. The text will be clipped if longer.	
release Date	string	Required	The date the video first became available. Used to sort programs chronologically and grouping related content in Roku Search. Conforms to the ISO 8601 format: {YYYY}-{MM}-{DD}. E.g.: 2015-11-11	
longDe scription	string	Required	A longer description that does not exceed 500 characters. The text will be clipped if longer. Must be different from shortDescription.	
tags	string	Optional	One or more tags (e.g., "dramas", "korean", etc.). Each tag is a string and is limited to 20 characters. Tags are used to define what content will be shown within a category.	
			*See Kids-Directed content for tag requirements	
genres	string	Optional	The genre(s) of the video. Must be one of the values listed in genres.	
credits	Credit Object	Optional	One or more credits. The cast and crew of the video.	
rating	Rating Object	Required	A parental rating for the content.  *See Kids-Directed content for rating requirements	

### shortFrom Ad Policy

- Please leave this filed blank
- Content less than 12 minutes with no adBreaks listed will automatically receive a single pre-roll ad

#### Short-form Video Object Example:

```
{\text{"id": "1509428502952", "title": "The Amazing Short-form Video", "content": { ... }, "thumbnail": "https://example.org/cdn/thumbnails/1509428502952/1", "shortDescription": "Astonishing short-form video", "releaseDate": "2016-01-01" }
```

### tvSpecial Content Type

Child object of root property  ${\tt tvSpecials}.$ 

### tvSpecial Ad Policy

Content length longer than 12 minutes:

- No adBreaks should be listed during the first 5 mins of playback
- No pre-roll adBreak should be listed 00:00:00
- adBreak cue points should be provided at naturally occurring scene breaks and/or fades to black
- There should be no less than 7 mins between each adBreak
- No adBreaks within the last 5 minutes of end credits

#### Content length less than 12 minutes:

- · Please leave this filed blank
- · Content less than 12 minutes with no adBreaks listed will automatically receive a single pre-roll ad

Field	Туре	Required	Description	
id	string	Required Your immutable string reference ID for the TV Special. THIS CANNOT CHANGE. This should serve as a unique movie across different locales.		
			Note: The ID for an asset must not exceed 50 characters.	
title	string	Required	Episode title. Roku uses this value for matching in Roku Search. Please don't include extra information like year, version label, etc.	
content	Content Object	Required	The actual video content, such as the URL of the video file, subtitles, etc.	
thumbn ail	string	Required	The URL of the thumbnail for the TV Special. This is used within your channel and in search results. Image dimensions must be at least 800x450 (width x height, 16x9 aspect ratio).	
			Landscape key art and portrait box cover graphics with the full title of the asset visible in a JPEG file. Image dimensions must be 1920x1080 (width x height, 16x9 aspect ratio) for landscape key art and 532px by 800px (width x height, 2x3 aspect ratio) for portrait box cover.	
genres	string	Required	The genre(s) of the movie. Must be one of the values listed in genres.	
release Date	string	Required	The date the TV Special first aired. Used to sort programs chronologically and grouping related content in Roku Search. Conforms to the ISO 8601 format: {YYYY}-{MM}-{DD}. E.g.: 2015-11-11	
shortDe scription	string	Required	A description of the special that does not exceed 200 characters. The text will be clipped if longer.	
longDe scription	string	Required	A longer episode description that does not exceed 500 characters. The text will be clipped if longer. Must be different from shortDescription.	
credits	Credit Object	Optional	One or more credits. The cast and crew of the TV special.	
rating	Rating	Required	A parental rating for the content.	
	Object		*See Kids-Directed content for rating requirements	
tags	string	Optional	One or more tags (e.g., "dramas", "korean", etc). Each tag is a string and is limited to 20 characters. Tags are used to define what content will be shown within a category.	
			*See Kids-Directed content for tag requirements	
external lds	External IDs Property	Optional	One or more third-party metadata provider IDs.	

#### TV Special Object Example:

### **LiveFeed Content Type**

All Linear Partners must utilize one of the Certified Linear Partners for their SSAI solution: Amagi, Wurl, Frequency or Xumo. Exceptions will only be considered if the partner can agree to abiding by all rules and requirements as outlined in the linear certification agreement which can be provided is such an exemption is necessary.

#### TRC Linear Guidelines and Testing

Child object of root property liveFeeds.

This object represents a live linear stream. Please contact your Roku representative if you want to create a channel that streams live linear content.

Field	Туре	Required	Description	
id	string	Required	Your immutable string reference ID for the live linear stream. THIS CANNOT CHANGE. This should serve as a unique identifier for the live stream across different locales. <b>Note</b> : The ID for an asset must not exceed 50 characters.	
title	string	Required	The live stream's title. Roku uses this value for matching in Roku Search. Please don't include extra information like year, version label, etc.	
content	Content Object	Required	The stream's actual live HLS stream, in the form of a URL.	
thumbn ail	string	Required	The URL of the primary thumbnail for the live stream. This is used within your channel and in search results. Image dimensions must be at least 800x450 (width x height, 16x9 aspect ratio).	
			Landscape key art and portrait box cover graphics with the full title of the asset visible in a JPEG file. Image dimensions must be 1920x1080 (width x height, 16x9 aspect ratio) for landscape key art and 532px by 800px (width x height, 2x3 aspect ratio) for portrait box cover.	
branded Thumbn	string	Required	The URL of the secondary thumbnail for the live stream. This is used as a backup in the event that the primary image is not suitable. Image dimensions must be at least 800x450 (width x height, 16x9 aspect ratio).	
ail			Landscape key art and portrait box cover graphics with the full title of the asset visible in a JPEG file. Image dimensions must be 1920x1080 (width x height, 16x9 aspect ratio) for landscape key art and 532px by 800px (width x height, 2x3 aspect ratio) for portrait box cover.	
shortDe scription	string	Required	A live stream description that does not exceed 200 characters. The text will be clipped if longer.	
longDes cription	string	Required	A longer live stream description that does not exceed 500 characters. The text will be clipped if longer. Must be different from shortDescription.	
tags	string	Optional	One or more tags (e.g., "dramas", "korean", etc.). Each tag is a string and is limited to 20 characters. Tags are used to define what content will be shown within a category and to find content for content curation purposes.	
			*See Kids-Directed content for tag requirements	
validityP eriodSta rt	string	Optional	The date when the content should become available in the ISO 8601 format: {YYYY}-{MM}-{DD}T{hh}:{mm}:{ss}+{TZ}. E.g.: 2018-11-11T22:21:37+00:00	
validityP eriodEnd	string	Optional	The date when the content is no longer available in the ISO 8601 format: {YYYY}-{MM}-{DD}T{hh}:{mm}:{ss}+{TZ}. E.g.: 2018-11-11T22:21:37+00:00 (set to a perpetuity date if possible)	
rating	Rating	Optional	A parental rating for the content.	
	Object		*See Kids-Directed content for rating requirements	
genres	string	Optional	The genre(s) of the event. Must be one of the values listed in genres.	

### Live Feed Object Example:

 $\label{lem:content.content:content.$ 

#### Live Feed Stream Rendition Requirements:

Target					
Rendition	Resolution	Bitrate			
1	384 x 216	230 Kbps			
2	384 x 216	440 Kbps			
3	512 x 288	700 Kbps			
4	720 x 404	1.2 Mbps			
5	1280 x 720	2.5 Mbps			
6	1920 x 1080	5 Mbps			

Category	Required/ Recommended	Requirement
Bitrate Ladder	Required	Minimum five different renditions

Resolution	Required	Minimum three different resolutions	
Aspect Ratio Required		Resolutions must remain the same across bit rates when switching / adapting	
Segment Duration Required		6 seconds each	
Segment Live Window	Required	6 segments	
Codec Standard	Required	H.264, Main Profile @ level 4.1 or lower	
Audio Codec Standard	Required	AAC Two Channel Stereo	
Audio Bitrate	Required	Set the audio sampling at a single rate regardless of bitrate. The recommended rate is 48KHz.	
Failover / Backup Server	Recommended	A secondary / backup server for each bitrate	

#### **Live Feed Ad Policy**

- Partners must accept Roku ad tags, which are VAST/VMAP 2.0 and higher compliant
- Partners should not serve any ads in the channel other than the ones returned by the Roku tag, unless explicitly agreed in the contract.
- Partners should adhere to the below ad length requirements:
  - General Audience
    - 8 minutes of ads per hour
    - Minimum 4 ads and maximum of 6 ads per pod
    - Ad pod length of 2 minutes
    - Duration between ad breaks of at least 10 minutes
  - Kids
- 6 minutes of ads per hour
- Minimum 3 ads and maximum of 6 ads per pods
- Ad pod length of 90 seconds
- Duration between ad breaks of at least 10 minutes
- Flexibility around the ad policy is provided during live events. Please discuss this with your Roku rep.

#### Passing Ad Parameters

Roku requires the following parameters be sent in every SSAI ad request. Some of them are sent in the initial stream request as URL parameters but others needs to be extracted from the stream. Example URL with parameters:

http://<stream-url>?rdid=deviceid1234&is lat=1

Parameter	Description	URL Key	Provided in the initial stream request?
Client IP	IP address of the client	ip	Yes, should be available in the request header
Device ID	ID of the device	rdid	yes
COPPA Flag	Flag to indicate children content	сорра	yes, but should be replaced with the information from the stream, if available
Limit Ad Tracking	Flag to limit ad tracking	ls_lat	yes
User Agent	User Agent	ua	yes
Content ID	ID of the content being streamed	content	no
Genre	Comma separated value of the genre of the content	genre	yes, but should be replaced with the information from the stream, if available
Platform Type	Type of platform (Roku, Web, Samsung etc.)	platform	yes
Content Type	Type of content (Movies, Series etc.)	content_type	yes, but should be replaced with the information from the stream, if available
Content Rating	Rating of the content (R, PG etc.)	content_rating	yes, but should be replaced with the information from the stream, if available

<sup>\*\*</sup> Do not include pixels, third-party tags, or Software Development Kits of any kind without express prior written approval and certification by Roku.

#### **Linear Channel Branding**

- Partners are permitted to have Logos, bugs and lower thirds in their channels
- No interactive overlays are permitted
  - No CTA for social media/web properties (visit us a youtube)

#### Content Policy

- Between the hours of 3am 11am PST movies/shows should be available for General Audiences: free of violence, nudity, substance abuse or sexual content.
  - During this time, content can **lightly** allude to violence and sex, but it must not be graphic, overt or threatening in any way.
- Between the hours of 3am 9pm PST movies/shows can have ratings G, PG-13, TVY, TVY7, TVPG, TV14
- Only after 9pm 3am PST can content be displayed with ratings of R, TVMA.
- Public policy and political issues must be presented with accuracy, honesty and fairness

- Foreign Language Programming

  - On English-language channels, subtitles must be included.
     No foreign-language (subtitled) programming allowed on Kids & Family channels.

#### Slate Requirements

- Must be animated & have audioMust include the linear channel logo/branding
- Must include a 2 min (the duration of an ad pod) timer/countdown
- · Must include messaging to indicate a break is in progress and programming will resume shortly
- No CTA
- Cannot promote a channel outside of TRC

### LiveFeed Promotion Guidelines

- Partners are not allowed to promote Partner content without explicit permission from TRC.
- When permitted Partner can promote Partner content in their current channel or other Partner content made available in TRC, either AVOD or Premium Subscriptions, in the slate only

### **Schedule Object**

All linear feeds require a schedule as part of the livefeed content object.

Field	Туре	Required	Description	
id	string	Required	Your immutable string reference ID to the program's content ID from its respective content type section. THIS CANNOT CHANGE. This should serve as a unique identifier for the live stream across different locales. <b>Note</b> : The ID for an asset must not exceed 50 characters.	
durationI nSeconds	integer	Required	the duration in seconds that the program will run.	
isLive	boolean	Required	true OR false - Identifies a program as a true live event.	
date	string	Required	Scheduled date for program to play. All times are UTC. Format: {YYYY}-{MM}-{DD}	
times	string	Required	An array of start times in the particular day the program will start [ "HH:MM:SS" ]	
attributes	enum	Recommen ded	May denote a number of badges to appear in the EPG UI next to a program's title. Currently, only "CC" for Closed Captions is supported.	

### **EPG**

**EPG** Requirement

### Required TV & Movie Data

8 days of full data (1 week forward and 24 Hours back) to populate the EPG

15-minute minimum duration for content block

Data	Importance	Details	Field
TMSID	High	De-duping, content recognition, Gracenote data/assets. Solves many issues as far as the data we need and the assets to align with the OTA experience.	externallds
Date	Required	Required for the EPG time grid, BoB	date
Duration (in seconds)	Required	Required for the EPG time grid, BoB; (15-minute minimum)	durationInSeconds
Name of Series / Required Name of Movie		Required for the EPG time grid, BoB, (35 characters max per line)	title
If Movie Required - Release date		Helps differentiate movies with the same titling	releaseDate
Season & Episode Numbers	High	Correct placement in JSON, no longer in titles of programs	seasons episodes
Episode Name	Required for series content	Episode name helps differentiate content (35 characters max per line)	title

Rating (Program level)	Required (for kids content)  High for everything else	Required for parental controls/FCC legal purposes.	rating
Attribute field High (Program level)		Used for current and future supported EPG display badges	*See below for Example
Captions	Required (if previously aired on broadcast in USA)	Required for a consistent viewing experience.	See: "caption Property" in Feed Spec
Caption attribute	High		"CC"
Genre	High	Used for search zones, content personalization/recommendations (please refer to publishers spec for genre classifications)	genres
Short Program Description	Required	Max amount of characters 110 characters	shortDescription
Program art  If movie, 2x3 Poster	Required	1920 x 1080 image of series with title treatment as first option, fall back would be episode level image.	thumbnail
	Optional	Alternative to 16x9 image, replaces "thumbnail"	thumbnailBoxcover

```
Attributes schema example
```

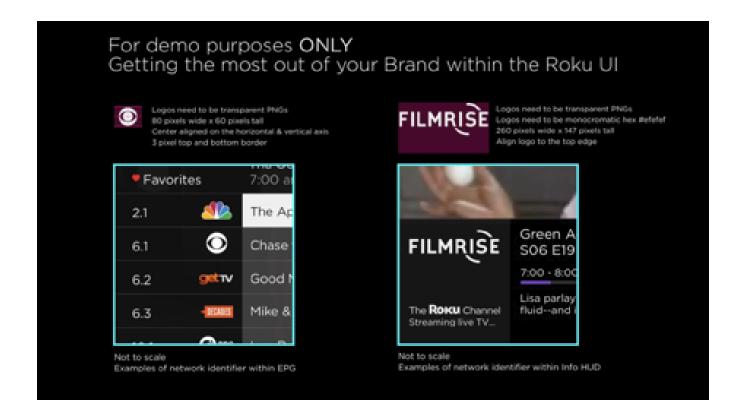
### Notes:

- Please include the liveFeed as the first item in a feed.
- Only a title or a **TMS** ExternalID is required for programs referenced in a schedule. We will reject anything that's not a **TMS** ExternalID.
- When referencing an episode, the parent items must also be in included (series and season when applicable). These parent items must be <u>fully populated with required fields</u> as specified in the Roku Direct Publisher feed specification or the series item must contain a valid External TMS id.

#### EPG/On Now Object Example:

```
{
                        "url": "https://<livestream url>.m3u8",
                        "quality": "FHD",
                        "videoType": "HLS"
                    }
                ],
                "language": "en",
                "schedule": [
                    {
                        "id": "movie-id-1",
                        "durationInSeconds": 7200,
                        "isLive": false,
                        "date": "2018-04-05",
                        "times": [
                            "10:00"
                    },
                        "id": "episode-id-1",
                        "durationInSeconds": 7200,
                        "isLive": false,
                        "date": "2018-04-05",
                        "times": [
                            "12:00",
                            "16:00"
                        ]
                    },
                        "id": "shortformvideo-id-1",
                        "durationInSeconds": 7200,
                        "isLive": false,
                        "date": "2018-04-05",
                        "times": [
                            "14:00"
                        1
                    },
                        "id": "tvspecial-id-1",
                        "durationInSeconds": 7200,
                        "isLive": true,
                        "date": "2018-04-05",
                        "times": [
                            "18:00"
                    },
                        "id": "movie-id-2",
                        "durationInSeconds": 3600,
                        "isLive": false,
                        "date": "2018-04-05",
                        "times": [
                            "20:00"
                    },
                        "id": "movie-id-3",
                        "durationInSeconds": 7200,
                        "isLive": false,
                        "date": "2018-04-05",
                        "times": [
                            "21:00"
                    }
                ]
            "thumbnail": "https://<imageUrl>.jpg",
            "brandedThumbnail": "https://<branded-imageUrl>.jpg",
            "shortDescription": "Live business and national news, with top executives interviews and coverage
of the technologies transforming our lives and economy.",
            "longDescription": "Live business and national news, with top executives interviews and coverage of
the technologies transforming our lives and economy."
```

```
"movies": [
                 {"id": "movie-id-1", "title": "movie1"},
                 {"id": "movie-id-2","externalIds": [{"id": "SH015001100000","idType": "TMS"}]},
                 {"id": "movie-id-3","title": "Namath","shortDescription": "[HBO] HD. Hall of Fame QB Joe Namath is the
focus of this film that looks at his fascinating journey as a sports star, media icon and sex symbol.","
longDescription": "[HBO] HD. Hall of Fame QB Joe Namath is the focus of this film that looks at his fascinating
journey as a sports star, media icon and sex symbol.", "releaseDate": "2012-01-28", "thumbnail": "https://edge.
roku-vod.top.comcast.net/2700879181/static/nosec/Roku/412/905/HBO_HB480_PMRS1277844_Movie_Landscape_1920x1080.
jpg", "thumbnailBoxcover": "https://edge.roku-vod.top.comcast.net/2700879181/static/nosec/Roku/412/905
["documentary", "sports"], "tags": ["sports", "documentary", "documentaries", "hbo hd", "hodx-hd", "hbo sports", "
movies and docus","hbo specials","hbo_english"],"credits": [{"name": "Not Specified","role": "director"},
{"name": "Liev Schreiber", "role": "actor"}], "externalIds": [{"id": "SH015001100000", "idType": "TMS"}], "rating":
{"ratingSource": "USA_PR", "rating": "TVPG"}, "content": {"dateAdded": "2019-03-01T23:19:19+00:00", "language":
"en-US", "duration": 5259, "validityPeriodStart": "2019-01-12T11:00:00Z", "validityPeriodEnd": "2020-01-01T10:59:
00Z", "captions": [{"language": "en-US", "url": "https://edge.roku-vod.top.comcast.net/2700879181/static/nosec
/Roku/412/905/NAMATH114891_HRHDPMRS1277844222a39d0_54138437844_srt_und_9.srt", "captionType": "CLOSED_CAPTION"},
["language": "en-US", "url": "https://edge.roku-vod.top.comcast.net/2700879181/static/nosec/Roku/412/905
/NAMATH114891_HRHDPMRS1277844222a39d0_54138437845_vtt_und_10.vtt","captionType": "CLOSED_CAPTION"}],"
trickPlayFiles": [{"quality": "FHD","url": "https://edge.roku-vod.top.comcast.net/2700879181/static/nosec/Roku
/412/905/NAMATH114891_HRHDPMRS1277844222a39d0_640x360_FHD_54138437846.bif"},{"quality": "HD","url":
"https://edge.roku-vod.top.comcast.net/2700879181/static/nosec/Roku/412/905
\label{lem:namath114891_HRHDPMRS1277844222a39d0_320x180_HD_54138437847.bif"}], "videos": [\{"url": "https://link.pdf.ex/"], "videos": [\left\] \text{"https://link.pdf.ex/"} \text{"https://link.pdf.ex/"}. \text{"https://link.pdf.ex/"} \text{"https://link.pdf.ex/"} \text{"https://link.pdf.ex/"}. \text{"https://link.pdf.ex/"} \text{"https://link.pdf.ex/"} \text{"https://link.pdf.ex/"}. \text{"https://link.pdf.ex/"} \text{"ht
theplatform.com/s/roku/media/HASizVuvQWaL?formats=ism&assetTypes=dynamic","quality": "FHD","videoType":
"SMOOTH", "drmAuthentication": {"drmContentProvider": "Comcast", "data": {"pid": "3YML1dxa8AxS"}}}}, {"url":
"https://link.theplatform.com/s/roku/media/HASizVuvQWaL?formats=mpeg-dash&assetTypes=dynamic","quality": "FHD"," | The properties of the
videoType": "DASH", "drmAuthentication": { "drmContentProvider": "Comcast", "data": { "pid": "2KGPVNQoabiB" } } },
{"url": "https://link.theplatform.com/s/roku/media/HASizVuvQWaL?formats=m3u&assetTypes=dynamic","quality":
"FHD", "videoType": "HLS", "drmAuthentication": { "drmContentProvider": "Comcast", "data": { "pid":
"3hETPbjWq2q4"}}}]}
        ],
        "series": [
                {
                         "id": "series-id-1","title": "series1",
                         "seasons": [
                                 {
                                                           "seasonNumber": 6,
                                                                                                      "episodes": [
                                                            "id": "episode-id-1", "title": "episode1", "episodeNumber": 59
                                          ]
                                 }
                         ]
                }
        1.
        "tvSpecials": [
                         "id": "tvspecial-id-1", "title": "tvspecial1"
                }
        "shortFormVideos": [
                         "id": "shortformvideo-id-1", "title": "shortformvideo1"
        ]
}
```



### **EPG Logos**

#### To be provided via .zip file to Roku

Program Guide channel Identifier (light)	Required	80x60 pixels (Needs to read well on a black background)
Program Guide channel Identifier (dark)	Required	80x60 pixels (Needs to read well on a white background)
2x Info HUD channel Identifier (see below)	Required	260x147 (MUST be hex color #efefef )

### For EPG

- 1 logo for white background, 1 for black background (can be the same image if reads well on both backgrounds)
- Logos need to be transparent PNGs
- 80 pixels wide x 60 pixels tall
- Center aligned on the horizontal & vertical axis
- 3 pixel top and bottom border

### For Info HUD

- Logos need to be transparent PNGs
- · Logos need to be monochromatic hex #efefef
- 260 pixels wide x 147 pixels tall
- 1x logo aligned to the top edge and center horizontally
- 1x logo center aligned

### **Kids-Directed Content**

"Kids-Directed Content" means content that either: (i) is directed to children as defined by the applicable law of the jurisdiction in which the content is shown (e.g., The Children's Online Privacy Protection Act); or (ii) was made for viewing primarily by children within the jurisdiction in which the content is shown

You may NOT submit or distribute Kids-Directed Content unless you have Roku's express written approval.

The following additional obligations apply to all Kids-Directed Content:

Field	Туре	Required	Description	
-------	------	----------	-------------	--

tags	string	Required	Include a "kidsdirected" tag into the tags string *all lowercase  This is how you flag to Roku that the content is Kids-Directed Content  Do not include this tag in non-Kids-Directed Content
rating	Rating Object	Required	*For Series: Please add tag on series and episodic level.  A parental rating for the content. (MPAA or TV Rating).  • 'Unrated' and "Not Rated" are not accepted ratings for Kids-Directed Content

The following additional obligations apply to all live linear streams that include Kids-Directed Content:

- You will only include Kids-Directed Content in a live linear stream if that live linear stream is (and will always be) comprised exclusively of Kids-Directed Content. Do not mingle Kids-Directed Content and non-Kids-Directed Content in a live linear feed.
- You will provide a single TV content rating in the Rating Object reflecting the most restrictive rating of all Kids-Directed Content that will be available on the live linear feed.

#### Additional kidsdirected Guidelines

A 'kidsdirected' tag should be inserted for any content that is directed to children, based on a variety of factors, including the following:

- Ratings which designate the content as designed to be appropriate for children (e.g., TV-Y or TV-Y7)
- · Content subject matter (e.g., teaching the alphabet)
- Visual content (e.g., unicorns)
- Use of animated characters (e.g., My Little Pony)
- · Child-oriented activities and incentives
- Music or other audio content designed for children (e.g., nursery rhymes)
- Young age of models (e.g., toddlers)
- Presence of child celebrities or celebrities who appeal to children
- Language or other characteristics of the content that target children
- Whether advertising appearing with the content is directed to children
- Whether your intended audience for the content is children
- · Whether you have competent and reliable empirical evidence that your audience composes primarily of children

#### **Optional Age Demographics Tags**

Additional tags can be inserted to help categorize kidsdirected content around age demographics. Please use these tags to define different content directed age groups:

Ages	Tags
Ages 1-3	ages_1-3
Ages 4-6	ages_4-6
Ages 7-9	ages_7-9
Ages 10+	ages_10plus

## **Content Properties**

### content Property

Child object of property:

- movie
- series -> episodes -> episode
- series -> seasons -> episodes -> episode
- shortFormVideo
- tvSpecial
- ullet liveFeed (only include required fields with "\*" )

This object represents the details about the content of a movie, episode, short-form video, or TV special.

Note: A content object must contain a video object and a caption object.

Field	Туре	Required	Description	
dateAdded	string	Required*	The date the video was added to the library in the ISO 8601 format: {YYYY}-{MM}-{DD}T{hh}:{mm}:{ss}+{TZ}. E.g.: 2015-11-11T22:21:37+00:00 This information is used to generate the "Recently Added" category.	
videos	Video Object	Required*	One or more video files. For non-adaptive streams, you can specify the same video with different qualities so the Roku player can choose the best one based on bandwidth.	
duration	integer	Required	Runtime in seconds.	
captions	Caption Object	Required	Supported formats are described in Closed Caption / Subtitle Support.	
trickPlayFiles	Trickplay File Object	Required	The trickplay file(s) that displays images as a user scrubs through a video, in Roku's BIF format. Trickplay files in multiple qualities can be provided.	
language	string	Required*	The language in which the video was originally produced (e.g., "en", "en-US", "es", etc). ISO 639 alpha-2 or alpha-3 language code string.	
validityPeriod Start	string	Optional	The date when the content should become available in the ISO 8601format: {YYYY}-{MM}-{DD}T{hh}:{mm}:{ss}+{TZ}. E.g.: 2015-11-11T22:21:37+00:00	
validityPeriod End	string	Optional	The date when the content is no longer available in the ISO 8601format: {YYYY}-{MM}-{DD}T{hh}:{mm}:{ss}+{TZ}. E.g.: 2015-11-11T22:21:37+00:00	
adBreaks	string	Required	One or more time codes. Represents a time duration from the beginning of the video where an ad shows up. Conforms to the format: {hh}:{mm}:{ss}.{mmm} and in the form of an SCTE-35 marker.	
			See each content type for its ad policy.	
			(e.g. 01:45:11.254)	
schedule (livefeed only)	Schedule Object	Required*	A chronological listing of program start times and durations referencing objects in other content type sections (movies, series, shortFormVideos, tvSpecials)	

### Content Object Example:

```
{ "dateAdded": "2015-11-11T22:21:37+00:00", "videos": [ ... ], "trickPlayFiles": [ ... ], "duration": 1290 }
```

### video Property

Child object of property content ->  ${\tt videos.}$ 

This object represents the details of a single video file. Preferred videoType format is **HLS**, **DASH** at minimum.

Field	Туре	Required	Description
url	string	Required	The URL of the video itself. The URL must use the secure protocol prefix "https://". All videos must play across multiple devices. The video should be served from a CDN (Content Distribution Network). Supported formats are described in Audio and Video Support.

quality	enum	Required	Must be one of t	Must be one of the following display types:		
			SD – Anything under 720p HD – 720p FHD – 1080p UHD – 4K  If your stream uses an adaptive bitrate, set the quality to the highest available. Provide at least six profiles of video quality bitrate ranging from 192 to at least 4000. Roku needs the low end to support mobile/web playback and also recommends the end in the 5000 range to support 4k TVs. The ideal bitrate ladder is included below, along with resolutions:			
			Resolution	Bitrate (video + audio)		
			1920 x 1080	5800		
			1920 x 1080	4300		
			1280 x 720	3500		
			1280 x 720	2750		
			720x404	1750		
			720x404	1100		
			512x288	700		
			384x216	400		
			384x216	192		
videoTy pe	enum	Required	Must be one of the following:  • HLS - Use display type quality "HD". Used for iOS devices, Web (Safari) • SMOOTH - Use display type quality "HD". Used for Roku and Samsung devices • DASH - Use display type quality "HD". Used for Android devices, Web (Chrome, FireFox, IE)  ** Please note that provided videos will need to be unencrypted as there is no encryption support  Audio:  At minimum, 1st track of Stereo Preferably with a 2nd track of Dolby (optional)			

Video Object Example:

```
 \label{lem:condition} \mbox{ {\tt "url": "https://example.org/cdn/videos/1509428502952", "quality": "UHD", "videoType": "HLS" } \mbox{ }
```

### caption Property

Child object of property content -> captions.

This object represents a single video caption file of a video content. The supported formats are described in Closed Caption / Subtitle Support.

Preferred Closed Caption formats:

- WebVTT
- SRT

Note: Please use clear and concise names for caption tracks ("English" or "English (CC)" or English (SDH), etc)

 $\textbf{Note} : For \ The \ Roku \ Channel \ all \ \texttt{content} \ \textbf{objects} \ \textbf{must} \ \textbf{contain} \ \textbf{a} \ \texttt{caption} \ \textbf{object}.$ 

Field	Туре	Required	Description	
url	string	Required	The URL of the video caption file. The URL must use the secure protocol prefix https://.  Supported formats are described in Closed Caption / Subtitle Support.	
language	string	Required	A language code for the subtitle (e.g., "en", "es-mx", "fr", etc). ISO 639-2 or alpha-3 language code string.	
captionType	enum	Required	A string specifying the type of caption. Default is subtitle. Must be one of the following:  • CLOSED_CAPTION • SUBTITLE	

Caption File Object Example:

```
"url": "https://example.org/cdn/subtitles/1509428502952/sub-fr.srt",
"Language": "fr",
"captionType": "CLOSED_CAPTION"
```

### trickPlayFile Property

Child object of property content -> trickPlayFiles.

This object represents a single trickPlay file. Trickplay files are the images shown when a user scrubs through a video, either fast-forwarding or rewinding. The file must be in the Roku BIF format as described in Trick Mode Support.

Field	Туре	Required	Description	
url	string	Required	The URL to the image representing the trickplay file. The URL must use the secure protocol prefix https://. Must be in the Roku BIF format, see Trick Mode Support.	
quality	enum	Required	Must be one of the following:  • HD – 720p • SD – Anything under 720p  For HLS, define both HD and SD.	

TrickPlay Files Object Example:

```
{ "url": "https://example.org/cdn/trickplayFiles/1509428502952/1", "quality": "FHD" }
```

### genres Property

The following genres are supported:

- action
- adventure
- animals
- animated
- anime
- comedy
- crime
- documentary • drama
- educational
- fantasy
- faith
- food
- fashion
- gaming
- health
- history
- horror • miniseries
- mystery
- nature
- news
- reality
- romance science
- science fiction
- sitcom
- special sports
- thriller
- technology

### externallds Property

Child object of property:

- ullet movie
- series
- series -> episodes -> episode

- series -> seasons -> episodes -> episode
- shortFormVideo
- tvSpecial

This object represents a third-party metadata provider ID (such as TMS, Rovi, IMDB, EIDR) that can provide more information about a specific video content. This metadata optimizes the opportunity for your content to be discovered by Roku search and to provide more details to users.

Field	Туре	Required	Description	
id	string	Required	The third-party metadata provider ID for your video content. For example, in the case of IMDB you would use the last part of the URL of a movie such as "http://www.imdb.com/title/tt0371724".	
idType	enum	Required	Must be one of the following:  TMS – A Tribune Metadata Service ID for the content. Roku recommends using TMS and will associate these IDs for you. ROVI - A Rovi ID for the content IMDB – An Internet Movie Database ID EIDR – An Entertainment Identifier Registry ID	

#### External IDs Object Example:

```
{ "id": "tt0371724", "idType": "IMDB" },
{ "id": "10.5240/48A5-E3C5-6B11-D874-FD2B-V", "idType": "EIDR" }
```

### rating Property

Child object of property:

- movie
- series -> episodes -> episode
- shortFormVideo
- tvSpecial

This object represents the rating for the video content. You can define the parental rating, as well as the source (USA Parental Rating, UK Content Provider, etc). See Parental Ratings and Rating Sources for acceptable values.

Field	Туре	Required	Description
rating	enum	Required	Must be a value listed in Parental Ratings.  Do not include any content targeted specifically to children.
ratingSource	enum	Required	Must be one of the following:  BBFC ** CHVRS CPR MPAA UK_CP USA_PR  See Rating Sources for more information.

<sup>\*\*</sup> UK content - rating is required. If there is no BBFC rating, please note a content rating of 'NR'

Rating Object Example:

```
{
    "rating": "PG",
    "ratingSource": "USA_PR"
}
```

### **Parental Ratings Property**

The following parental ratings can be used to better help your viewers find age-appropriate content.

Note: No content can be targeted specifically to children. No pornographic or porn industry-related content is allowed.

- 12
- 12A
- 14+ • 14A
- 14A • 15
- 18

- 18+
- 18A
- A
- AA • C
- C8
- E
- NC17 Do not include content targeted for NC17
- NR
- PG
- PG13
- R
- R18
- TV14
- TVG
- TVMA
- TVPG
- TVY
- TVY14
- TVY7
- []
- Uc
- UNRATED

### ratingSource Property

These are the accepted values for the ratingSource property followed by their meaning:

- BBFC British Board of Film Classification
- CHVRS Canadian Home Video Rating System
- CPR Canadian Parental Rating
- MPAA Motion Picture Association of America
- USA\_PR USA Parental Rating
- TV Ratings TV Parental Guidelines

### credit Property

Child object of property:

- movie
- series
- series -> episodes -> episode
- shortFormVideo
- tvSpecial

This object represents a single person in the credits of a video content.

Field	Туре	Required	Description
name	string	required	name of the person
role	enum	required	role of the person - must be one of the following values:      actor     anchor     host     narrator     voice     director     producer     screenwriter

#### Credit Object Example:

```
{ "name": "Douglas N. Adams", "role": "screenwriter", "birthDate": "1952-03-11" }
```

## Change Log

• 2020-01-21 - Version 2.9.1 - Added back releaseDate to episode level data.

- 2020-12-03 Version 2.9 Removed start/end time from json sample; reduced content property requirements for livefeeds; added schedule object, added season/episode number fields in sample
- 2020-04-07 Version 2.7 Age demographics tags 2020-01-17 Version 2.7 Linear EPG
- 2019-11-05 Version 2.6 Linear Channel Branding, Millisecond adBreaks, BBFC Ratings for UK, Episodic Ad Policy
- 2019-08-05 Version 2.5 Added EPG, additional kidsdirected guidelines, and update requirement for branded artwork.
- 2019-04-24 Version 2.4 Added tags to episodic content type, updated Kids Directed requirements
- 2019-03-08 Version 2.3 Updated kidsDirected content policy requirements.
- 2019-03-08 Version 2.2 Updated ad policy for movies, TV, and shortform. Updated specifications for video Property.
   2018-10-05 Version 2.1 Added ad policy to liveFeed content type.
- 2018-08-05 Version 2.0 Updated externalIDs. Escalated TrickPlayFiles from optional to required. Added artwork requirements.
- 2018-04-06 Version 1.0 Changed live to liveFeeds and liveLinear to liveFeed.
- 2018-04-05 Version 1.0 Added information for The Roku Channel and live streams, Version 1.0.
- 2018-04-02 Version 1.0 Document created.

### References

- JSON Schema Draft 4: http://json-schema.org/latest/json-schema-core.html
- ISO 8601: http://www.iso.org/iso/home/standards/iso8601.htm
- JSON Schema Validator: http://www.jsonschemavalidator.net/
- JSON Schema Lint: http://jsonschemalint.com/draft4/