# EW Scripps BluePrint Onboarding

This document describes the assets needed to onboard a client into the EW Scripps OTT platform BluePrint. It includes specifications for application configuration, content feeds (including ad cue points) and style guide information.

**Device Support**

BluePrint supports the following streaming devices and SmartTV platforms:

* Streaming Devices
  + Roku
  + FireTV
  + Apple TV
* SmartTV Platforms
  + Samsung
  + Vizio
  + LG
  + Vewd
  + Xbox One
  + HiSense
  + AndroidTV
  + ElementTV
  + Vugo
  + Ziosk

## Application Configuration

Applications are configured via the BluePrint admin interface. The following describes the fields available for configuration.

| **Parameter Name** | **Description** | **Default Value** | **Supported On** |
| --- | --- | --- | --- |
| Title | The title of the application |  | All |
| Platform | The OTT/CTV platform this config is valid for |  | All |
| Google Analytics Id | A valid google analytics tracking ID to send application/video events to. In format UA-XXXXXXX-XX | None | All |
| Autostart Feed | A specific feed that will play on application startup. | None | All |
| Autostart on Constrained | If true, the autostart feed will start on constrained devices | False | All |
| Fetch item Feed | A feed used to fetch a single item by ID. See [Deep Linking](#_y5zh1pek7kj0) |  | All |
| Search | See [Search](#_yrz9vyxnqoki) |  | All |
| Start In Fullscreen | If true, the player will start in full screen, otherwise the player will start minimized while the menu screen loads | false | All |
| Full Screen Timeout | Specifies the amount of non-interaction time (in seconds) before the player returns to full screen | 20 | All |
| Ads | Configuration for VOD ads. See [Ad Configurations](#_tnkl1gjl51mq) | None | All |
| Live | See Live Config |  | All |
| Background Color | The background color of the app | #000000 | All |
| Accent Color | Accent color of the app |  | All |
| Shelf Title Color | The default color for shelf titles | #FFFFFF | All |
| Now Playing Title Color | The color for the title of what is currently playing | #FFFFFF | All |
| Now Playing Description Color | The color for the description of what is currently playing | #FFFFFF | All |
| Allow resume | If true, the user will be prompted to resume videos that they have already started watching | False | All |
| Terms of Service | The plain text version of your terms of service for the app |  | All |
| Privacy Policy | The plain text version of your privacy policy for the app |  | All |
| Constrained devices | Comma separated list of devices that are considered to be memory constrained |  | All |
| Auto refresh on Constrained | If true, auto refresh of shelves will be enabled on constrained devices | False | All |
| Playing Timeout | Number of seconds a video can be stuck in *playing* state without getting to the end of the video before it’s skipped | 5 | Roku |
| Shelves | A list of [shelf](#_wi0uliip08dq) items to display on the home screen of the application |  | All |

## Shelf Configuration

Each shelf displayed in the application needs to be configured with a content feed and metadata to describe it. The following table describes the available options for shelf configuration.

| **Parameter Name** | **Description** | **Required** | **Default Value** |
| --- | --- | --- | --- |
| Title | The display title of the shelf | Yes | None |
| Feed | The feed to load into this shelf  See [Feed](#_q6vscc8e3x73) Configuration | Yes | None |
| Use Feed Title | If true, overrides the shelf title with the <title> tag in the feed | No | false |
| Display Type | Determines the visual representation of the items in the shelf.  See [Display Type](#_bjf8r4fo9l7) Configuration | Yes |  |
| Show Row Count | If true, displays the X of X in the shelf header | No | true |
| Show Title | If true, display the shelf title, otherwise suppress it | No | true |
| Display | If true, display this shelf. If false, suppress it | No | true |
| Chain Items | If true, items will play as a playlist with no user interaction | No | true |
| Loop | If true (and chained) the playlist will repeat from the beginning at the end | No | true |
| Auto Refresh Interval | How often to refresh this shelf | No |  |
| Auto Refresh Interval On Constrained | If auto refresh is turned on for constrained, how often to refresh the shelf | No |  |
| Load On Constrained | If false, this shelf will not load on constrained devices | No | true |
| Item Limit | Number of items from the feed to show in the shelf | No |  |
| Item Limit Constrained | Number of items from the feed to show in the shelf on constrained devices | No |  |
| Child Shelves | An array of Shelf Items that display as child shelves when items from this shelf are selected | No |  |

## Shelf Display Types

Each shelf can have a display type that describes how the items in the shelf are displayed. This table describes the properties on the config.

| **Parameter Name** | **Description** | **Required** | **Default Value** |
| --- | --- | --- | --- |
| Name | Internal name for the Display Type | Yes | None |
| Type Name | One of wideBox | Yes | None |
| Use Feed Title | If true, overrides the shelf title with the <title> tag in the feed | No | false |
| Display Type | Determines the visual representation of the items in the shelf. Valid values are wideBox, banner, tallBox.  See [Examples](#_kwyptg1upq8s) | Yes | wideBox |
| Title Color | The color of the item’s title | Yes |  |
| Background Color | The color of the background of the item’s title | Yes | #00000000 |
| Show Title | If true, display the item’s title | No | true |
| Title Num Lines | The max number of lines to use for the title. | Yes | 2 |
| Title Vertical Alignment | Top, Center, or Bottom | Yes | Center |

##### Examples

**wideBox**

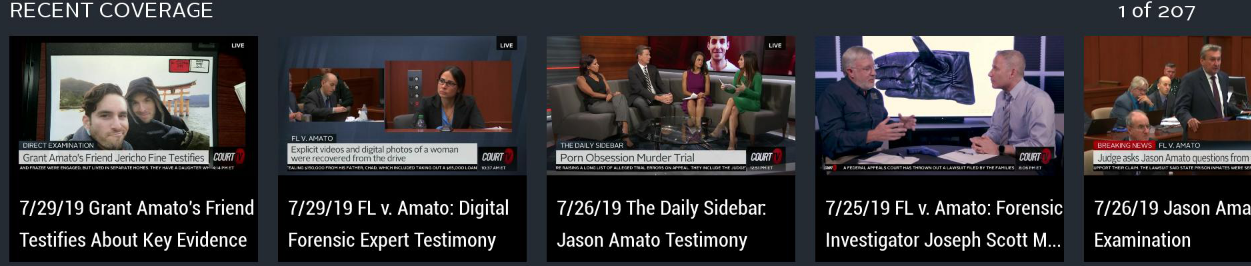


Image Size: 350x197

**banner**

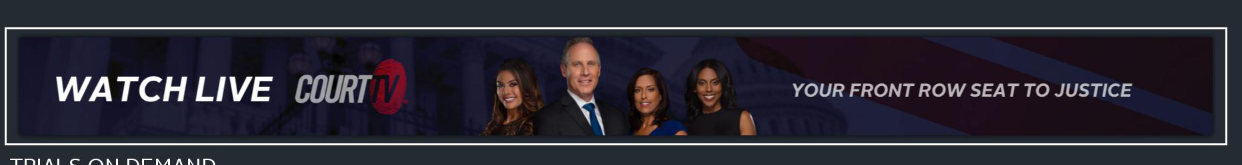


Image Size: 1489x134

**tallBox**

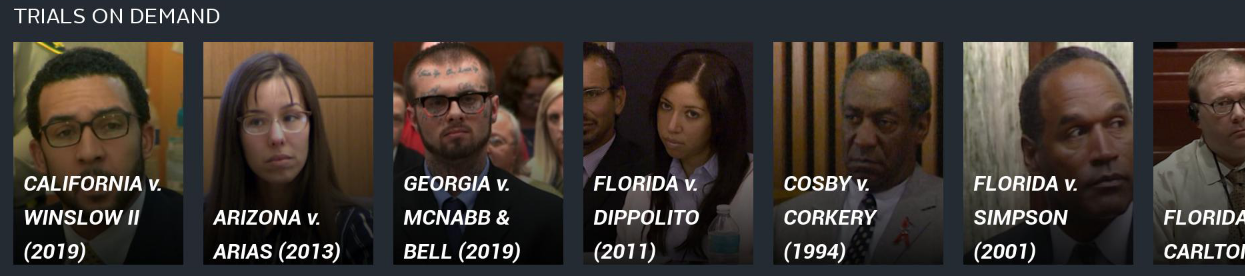


Image Size: 255x334

## Content Feeds

BluePrint utilizes standard MRSS feeds for all content.

**Feed Formats**

BluePrint supports MRSS 1.5.1 and the additional elements needed by Google Ad Manager for ad insertion. The following section describes these feeds in detail. Links to the full specs are provided for your reference:

* [**MRSS 1.5.1 Specification**](http://www.rssboard.org/media-rss)
* [**Google Ad Manager MRSS Element Specification**](https://support.google.com/admanager/answer/7495798)

**Elements List**

The following is a complete list of elements BluePrint supports along with description and examples. Note: fields marked with \* are required. Fields marked with \* are required for dynamic ad serving.

* Channel
  + lastBuildDate
  + Title
  + dfpvideo:version\*
  + atom:link\*
* Item
  + guid\*
  + pubDate\*
  + media:title\*
  + media:description\*
  + media:category\*
  + media:keywords\*
  + media:thumbnail\*
  + media:content\*
  + media:subTitle
  + dcterms:valid
  + dfpvideo:contentID\*
  + dfpvideo:lastModifiedDate\*
  + dfpvideo:lastMediaModifiedDate\*
  + dfpvideo:ingestUrl\*
  + dfpvideo:cuepoints\*
  + dfpvideo:keyvalues\*
  + dfpvideo:closedCaptionUrl
  + contentType

#### ***Channel Sub-Elements***

The following are sub-elements of the <channel> element.

###### **lastBuildDate**

*Optional*

The last time the feed was updated, in ISO8601 format: {YYYY}-{MM}-{DD}T{hh}:{mm}:{ss}+{TZ}. E.g.: 2015-11-11T22:21:37+00:00

**Example:**

| <lastBuildDate>2020-02-04T09:15:06+00:00</lastBuildDate> |
| --- |

###### **title**

*Optional (Required if using Dynamic Ad Insertion)*

If supplied and configured to do so will override the title in the shelf this feed is used in. See shelf configuration.

**Example:**

| <title>Top Stories</title> |
| --- |

###### dfpvideo:version

*Required for dynamic ad insertion*

Indicates the current version of the MRSS spec that this feed uses. The value should always be set to 2 and set once per feed.

**Example:**

| <dfpvideo:version>2</dfpvideo:version> |
| --- |

###### atom:link

*Required for dynamic ad insertion*

Identifies the feed's paging information. Google Ad Manager reads this element for two attributes: rel and href.

**Example:**

| <atom:link rel='next' href='http://www.feedprovider.com/video/account/vids?page3'/> |
| --- |

###### item

*Repeatable*

Each <item> represents a single video. This node should be repeated for each video in the feed. See *Item Sub-Elements* for a description of each element in an <item>.

**Example:**

| <item>  <guid>12345-12345-12345</guid>  <pubDate>2016-09-07T09:42:31+00:00</pubDate>  <media:title>The Best Show Ever</media:title>  <media:description>So long, and thanks for all the fish.</media:description>  <media:category>cooking</media:category>  <media:category>reality</media:category>  <media:thumbnail url="http://example.org/cdn/thumbs/42/lkmfaAAmA.jpg" />  <media:content  url="https://example.org/videos/your-video-id.mp4"  duration="74.74"  bitrate="2500"  language="en-us" />  <media:subTitle  lang="en-us"  href="http://www.example.org/cdn/subtitles/subtitle.srt" />  </item> |
| --- |

#### ***Item Sub-Elements***

The following are sub-elements of the <item> element.

###### guid

*Required*

The unique and immutable ID for the video.

**Example:**

| <guid>12345-12345-12345</guid> |
| --- |

###### pubDate

*Required*

The date the video first became available in ISO8601 format: {YYYY}-{MM}-{DD}T{hh}:{mm}:{ss}+{TZ}. E.g.: 2015-11-11T22:21:37+00:00

**Example:**

| <pubDate>2020-02-01T09:00:00+00:00</pubDate> |
| --- |

###### media:title

*Required*

The video title. Use plain text and don’t include extra information like year, version, rating, etc.

**Example:**

| <media:title>The Best Show Ever</media:title> |
| --- |

###### media:description

*Required*

Description of the video. Max length of 200 characters.

**Example:**

| <media:description>So long, and thanks for all the fish. </media:description> |
| --- |

###### media:category

*Required*

One or more categories that describe the video. Note: Either <media:category> or <media:keywords> is required.

**Example:**

| <media:category>Cooking</media:category> |
| --- |

or

| <media:category>Cooking</media:category>  <media:category>Reality</media:category> |
| --- |

###### media:keywords

*Required*

A comma-separated list of keywords that describe the video. Note: Either <media:category> or <media:keywords> is required.

**Example:**

| <media:keywords>cooking, reality, food</media:keywords> |
| --- |

###### media:thumbnail

*Required*

The thumbnail used within the application for the video. The image size must be 800x450 (width x height)or larger, with a 16x9 aspect ratio. JPG and PNG formats are supported.

*Attributes*

| **Name** | **Required** | **Description** |
| --- | --- | --- |
| url | Yes | The URL of the thumbnail. |

**Example:**

| <media:thumbnail url=”http://example.org/cdn/thumbs/42/image.jpg”/> |
| --- |

###### media:content

*Required*

The actual video URL. MP4 and HLS (m3u8) formats are supported.

*Attributes*

| **Name** | **Required** | **Description** |
| --- | --- | --- |
| url | Yes | The URL of the video. |
| duration | Yes | The duration of the video in seconds. |
| bitrate | No | The bitrate of the file. |
| lang | No | The original language of the video file. |

**Example:**

| <media:content url=”<http://example.org/cdn/video/42/video.m3u8>” duration=”1382”/> |
| --- |

###### media:subTitle

*Optional*

One or more subtitle files for the video. Subtitle file type support varies by platform. Generally, the most supported formats are SRT and WebVTT.

*Attributes*

| **Name** | **Required** | **Description** |
| --- | --- | --- |
| href | Yes | The URL of the subtitle file. |
| lang | Yes | The language of the subtitle file. |

**Example:**

| <media:subTitle href=”[http://example.org/cdn/video/42/english.](http://example.org/cdn/video/42/video.m3u8)srt” lang=”en-us”/> |
| --- |

###### dcterms:valid

*Optional*

The validity period of the video. The video will not be displayed to the user unless it is within the validity period. Dates are specified in the ISO8601 format: {YYYY}-{MM}-{DD}T{hh}:{mm}:{ss}+{TZ}. E.g.: 2015-11-11T22:21:37+00:00

**Example:**

| <dcterms:valid>  start=2020-01-01T00:00:00+00:00;  end=2020-01-30:T23:59:59+00:00;  scheme=W3C-DTF  </dcterms:valid> |
| --- |

###### dfpvideo:contentID

*Required for dynamic ad insertion*

Stored as the CMS content ID in Google Ad Manager. It can be numeric or alphanumeric, and is case sensitive.

**Example:**

| <dfpvideo:contentId>12345</dfpvideo:contentId> |
| --- |

###### dfpvideo:lastModifiedDate

*Required for dynamic ad insertion*

Indicates when any aspect of the video or its metadata was last modified. All time stamps must conform to RFC 822 specification or follow IS0 8601 format. If the time zone is not included in the time stamp string, it defaults to Pacific Standard Time (PST).

**Example:**

| <dfpvideo:lastModifiedDate>2006-02-19T04:22:39+05:00</dfpvideo:lastModifiedDate> |
| --- |

###### dfpvideo:ingestUrl

*Required for dynamic ad insertion*

Node for specifying the video ingest URL to the master m3u8 file used for conditioning and playlist generation within Google Ad Manager.

*Attributes*

| **Name** | **Required** | **Description** |
| --- | --- | --- |
| type | Yes | should be set to HLS (application/x-mpegURL) or DASH (application/dash+xml). |
| preconditioned | Yes | See below |

preconditioned attribute: should be set to true or false to indicate if the ingestURL for this content is already conditioned for mid-roll ads, which means that your segments are already split at the time of ad breaks. This attribute defaults to false if not explicitly set.

Content is considered conditioned if the video segments in your stream are timed precisely for cue points to insert ads. If so, there should be a #EXT-X-PLACEMENT-OPPORTUNITY marker in the HLS stream to indicate to Google Ad Manager that an ad break should be inserted at this point in the video content.

If content is not preconditioned as described above, Google Ad Manager can condition the HLS stream and upload the HLS segments directly into your CDN. The approved CDN options are Akamai or an SFTP connection to S3. Credentials, shown below, for [setting up the mid-roll CDN configurations](https://support.google.com/admanager/answer/7294300?hl=en&ref_topic=7258481) within Google Ad Manager for either option will need to be provided.

**Akamai**

1. Path Prefix - *The upload directory where the conditioned content will be written.*
2. Account Name - *Akamai NetStorage authentication requires an account name.*
3. API Key Name - *Akamai NetStorage authentication requires an API key name.*
4. API Key - *Akamai NetStorage requires an API key*.
5. Delivery URL Prefix - *The URL prefix for the CDN that will be used to host the delivered content.*

**Amazon S3** (SFTP only)

1. Path Prefix - *The upload directory where the conditioned content will be written.*
2. Username - *Depending on the server, a username may be required to upload or serve content.*
3. Private Key - *The key used to open a secure connection with the CDN where split content segments will be uploaded.*
4. Private Key Passphrase - *Depending on the publisher's server, uploading a file may require a private key, a password, or both.*
5. Hostname - *The hostname for the uploaded conditioned content files.*
6. Delivery URL Prefix - *The URL prefix for the CDN that will be used to host the delivered content.*

**Example:**

| <dfpvideo:ingestUrl type="application/x-mpegURL" preconditioned="false">https://cdn.example.com/?v=123.m3u8</dfpvideo:ingestUrl> |
| --- |

###### dfpvideo:lastMediaModifiedDate

*Required for dynamic ad insertion*

Indicates when the video file referenced in <dfpvideo:ingestUrl> was last modified. If this value is ever updated in the feed the lastModifiedDate for the content also needs to be updated. All timestamps must conform to RFC 822 specification or follow IS0 8601 format. If the time zone is not included in the time stamp string, it defaults to Pacific Standard Time (PST).

**Example:**

| <dfpvideo:lastMediaModifiedDate>2006-02-19T04:22:39+05:00</dfpvideo:lastMediaModifiedDate> |
| --- |

###### dfpvideo:cuepoints

*Required for dynamic ad insertion*

Identifies the cue points in seconds, separated by commas. Cue points are places in time where an ad can be inserted in the video. Fractional seconds are supported for up to 3 digits (for example, 55.532 seconds). Additional digits beyond 3 are truncated.

**Example:**

| <dfpvideo:cuepoints>55.532,109</dfpvideo:cuepoints> |
| --- |

###### dfpvideo:keyvalues

*Optional for dynamic ad insertion*

Identifies any custom metadata for the video.

*Attributes*

| **Name** | **Required** | **Description** |
| --- | --- | --- |
| key | Yes | Ensure your key-values comply with these [format requirements](https://support.google.com/admanager/answer/177381#format_keys). |
| value | Yes | Ensure your key-values comply with these [format requirements](https://support.google.com/admanager/answer/177381#format_keys). |
| type | Yes | Int, long or string. |

**Example:**

| <dfpvideo:keyvalues key="category" value="world news" type="string"/> |
| --- |

###### dfpvideo:closedCaptionUrl

*Optional for dynamic ad insertion*

The URL to a valid closed caption file for this video in either TTML/DXFP (application/ttaf+xml) or WebVTT (text/vtt) format.

*Attributes*

| **Name** | **Required** | **Description** |
| --- | --- | --- |
| language | Yes | en |
| name | Required | English |
| type | Required | text/vtt or application/ttaf+xml |

**Example:**

| <dfpvideo:closedCaptionUrl language="en" name="English" type="text/vtt">http://cdn.com/subtitle.vtt</dfpvideo:closedCaptionUrl> |
| --- |

###### contentType

*Optional*

Either live or vod default is vod.

**Example:**

| <contentType>live</contentType> |
| --- |

## Dynamic Ad Insertion

Google Ad Manager can configure custom ad rules to serve pre-roll and/or post-roll for video asset. Mid-roll ads\* (inserted during a single video asset) utilize cue points.

It’s recommended to add cue points to all possible ad breaks within a single video asset. This allows ad rules to customize mid-roll breakpoints, such as every nth cue point or at fixed cue points, and provides the most ad insertion flexibility. The number of ads, and the duration of ads, can be configured for all ad insertion points (pre, mid, post).

\*If a feed item doesn’t contain a cue point element, mid-roll ads can’t be utilized. However, both pre-roll and/or post-roll ads can still be utilized.

## Assets

The following section details the graphical assets and style information needed for each platform.

### Roku

| **Name** | **Type** | **Required** | **Description** | **Requirements** |
| --- | --- | --- | --- | --- |
| Channel Logo | Image (JPG/PNG) | Yes | Displays on the home screen of the channel | 400x90 |
| Channel Poster | Image (JPG/PNG) | Yes | Displayed on the Roku Home screen and the channel store | 540x405  290x218  246x140 |
| Splash Screen | Image (JPG/PNG) | Yes | Displayed while the channel is loading | 1920x1080  1280x720  720x480 |
| Background Image | Image (JPG/PNG) | No | Displayed behind the main screen of the app (behind player/shelves) | 1920x1080  1280x720  720x480 |
| Live Bug | Image (PNG) | No | Displays in the “Now Playing”/”Description” area if content is live | 83x37 |
| Background Color | Color Hex | No | The background color of the application. Will be behind the background image if provided. Default is black |  |
| Accent Color | Color Hex | Yes | The accent color for the application. Used for progress bars, focus indicators, etc |  |

### Universal

| **Name** | **Type** | **Required** | **Description** | **Requirements** |
| --- | --- | --- | --- | --- |
| Logo | Image (PNG/SVG) | Yes | Displayed in app on browse screen. | 153x77 |
| App Icon (FireTV) | Image (PNG) | Yes | Displayed on the FireTV Store | 1920x1080 |
| Splash Screen (FireTV) | Image (PNG) | Yes | Displayed on the FireTV app launch | 1920x1080 |
| App Icon (Samsung) | Image (PNG) | Yes | Displayed on Samsung Store | 1280x720 |
| Background Image | Image (JPG/PNG) | No | Displayed behind the main screen of the app (behind player/shelves) | 1920x1080 |
| Live Bug Color | Color Hex | No | Displays in the “Now Playing”/”Description” area if content is live |  |
| Background Color | Color Hex | No | The background color of the application. Will be behind the background image if provided. Default is black |  |
| Accent Color | Color Hex | Yes | The accent color for the application. Used for progress bars, focus indicators, etc |  |

## Deep Linking

To support deep linking to content on a platform, provide a Fetch Item feed on the main config. This feed should contain *CONTENT\_ID* macro. The device will replace that macro with the specific ID of the linked to video. This feed should return a single item for the given *CONTENT\_ID*.

## Search

Search can be enabled by specifying a valid search config on the application. The below table describes the search config.

| **Parameter Name** | **Description** | **Required** | **Default Value** |
| --- | --- | --- | --- |
| Title | An internal name for the search config | Yes |  |
| Shelf | A shelf used to house the [Search feed](#_n4mvt97t4gwm) and display properties for the search results. | Yes |  |
| No Results Text | Text to display when the search returns an empty result set | Yes | No Results |
| Search Prompt | Text to display in the search field before a user enters a search term | Yes | Search ... |
| Min Chars Before Search | The minimum number of characters the user must enter in the search field before the system queries the [Search Feed](#_n4mvt97t4gwm) | Yes | 3 |
| Keyboard Timeout | The number of seconds that must elapse with no keyboard input before the system queries the [Search Feed](#_n4mvt97t4gwm) | Yes | 3 |

#### Search Feed

The search feed should point to a feed that returns items when passed a *SEARCH\_TERM*. This macro will be replaced in the URL of the feed when the user specifies a search query.

## Ad Configurations

BluePrint supports ad insertion via Google’s DAI and Verizon Uplynk for both VOD and Live content. Depending on your setup you will need to provide one or more ad configurations. The below tables describe the properties for both Google Ad Manager and Uplynk Ad Configs

#### Google Ad Manager

| **Parameter Name** | **Description** | **Required** | **Default Value** |
| --- | --- | --- | --- |
| Name | An internal name for the search config | Yes |  |
| Enabled | Whether or not ads should be enabled | Yes | True |
| Show Ad Markers | If true, vertical bars in the scrub bar on the video player will show the location of ads | Yes | True |
| Ad Marker Color | Hex color value for the ad markers | Yes | #FFFFFF |
| Ad Marker Width | Width of the Ad Marker in pixels | Yes | 5 |
| Show Ad Overlay | If true, and overlay in the top left corner of the screen will show: Ad X of X | Yes | False |
| Cmsid | The Google DAI content source Id | Yes |  |
| AdTagParameters | Any extra ad params you want passed to GAM | No |  |
| Cadence | For VOD, how often prerolls should be fired (every N videos) | No |  |

#### Uplynk

| **Parameter Name** | **Description** | **Required** | **Default Value** |
| --- | --- | --- | --- |
| Name | An internal name for the search config | Yes |  |
| Enabled | Whether or not ads should be enabled | Yes | True |
| Show Ad Markers | If true, vertical bars in the scrub bar on the video player will show the location of ads | Yes | True |
| Ad Marker Color | Hex color value for the ad markers | Yes | #FFFFFF |
| Ad Marker Width | Width of the Ad Marker in pixels | Yes | 5 |
| Show Ad Overlay | If true, and overlay in the top left corner of the screen will show: Ad X of X | Yes | False |
| Parameters | The parameters to append to the uplynk stream URL for ad targeting | No |  |