



# On API

## Developer Reference

Release 3.24

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## About Nielsen

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## About the On API

Pay TV operators, OTT services, smart device manufacturers and other providers rely on TV schedules plus descriptive video data and imagery to power on-screen guides and discovery. To ensure that audiences can always find and enjoy their favorite TV shows, movies and sports programs, providers require accurate, up-to-the-minute video data that they can quickly and easily integrate into their systems and products.

With On API, you have robust and streamlined access to the entertainment industry's most comprehensive, highest quality, and freshest data via simplified data streams and delta updates. Accelerated data updates are available in near real time, capturing time-critical program updates and schedule changes.

On API includes a set of data delivery APIs designed to ingest large amounts of metadata into your Content Delivery Network. Using these APIs, you can build a Service Delivery Platform (SDP) to deliver current and relevant data to end-user devices.

You can find additional information and support resources on the [Gracenote Help Center](#), including the [Gracenote On API Implementation Guide](#).

Core metadata and imagery includes the following:

- Comprehensive TV show and movie information, covering titles, descriptions, genres, cast details and more across 55+ countries and territories in 35+ languages.
- Detailed listings for thousands of linear and FAST channels, along with availability data for 260+ local, regional and global streaming content catalogs.
- Channel lineups and stations for over-the-air, cable/fiber, satellite, and streaming providers.
- Live sports broadcast and streaming event information for your favorite sports and teams that allow you to create compelling content carousels and “Where to Watch” functionality.
- Normalized data with a standardized taxonomy and unique content IDs for series, season and episode hierarchy, movies, cast members, ratings, advisories, premiere and finale dates, original air dates and the countries of release and production and more.
- Vast image library offering various types of images for movies and TV, including talent photos, logos, episodic and series-level images and channel logos

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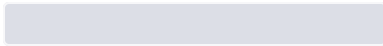
## Release Notes

For the latest release information, see customer notifications on the [Gracernote Help Center](#).

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## API Data Delivery

This section describes data delivery, how to seed databases, and retrieve API updates.





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## Getting Updates

On API is a set of streaming endpoints designed for staying up to date with the latest data. Gracenote assigns each customer their own data stream containing only the data pertinent to their subscription, aka API “entitlement”. Whenever a change is made on any entitled object in a given endpoint, an incrementing updateId number is assigned to that latest version of the object, and the entire object is moved to the “tail” of the endpoint (endpoint order is objects with oldest changes first).

You can keep your data up to date by periodically querying for updates that have occurred since the last ingested updateId. To load/reload endpoint data in its entirety, start with updateId=0.

### API

```
http://on-api.gracenote.com/v3/[endpoint]
?updateId=[updateId value]
&limit=[limit value]
&api_key=[your-api-key]
```

### Request Parameters

Parameter	Description
updateId	ID token used to make incremental requests.
limit	Number of records to be requested. 1000 is the standard and maximum allowed.
api_key	Your API key

The On API endpoint response includes a nextUpdateId field and a maxUpdateId field within the streamData node. Use the nextUpdateId value to continue fetching the endpoint data; Once you reach the current end of updates (EOS, “end of stream”), the nextUpdateId field will not be provided. The maxUpdateId value is always provided for calls using this delivery mechanism. Once you reach the EOS, the next updateId to request will be maxUpdateId + 1.



**Important:** Due to the large volume of data entitlements, Gracenote engineering has enabled a limit parameter to control batch size of each request.

We recommend requesting with a limit of 1000 records per query across all endpoints except Lineups. The maximum allowable limit for the Lineups endpoint is 10. Higher limit values are not supported and are hard limited to the above mentioned maximums (i.e. will not result in an error but the API will ignore the requested limit parameter if over the maximum).

We do our best to optimize the API for all of our global customers. However, if you encounter performance issues like the response taking too long, or not getting a response at all, we recommend retrying with a reduced batch size.

## Data Structure

The On API is designed to deliver a stream of updates for any given data set. This returned XML consists of the Header containing requestParameters and streamData nodes, and the payload containing the list of actual endpoint objects such as Programs. The Header requestParameters reflect the parameters from the URL; this can be useful for validation/troubleshooting purposes. The streamData node contains the nextUpdateId and maxUpdateId values. These two values are also returned in the HTTP response header. We recommend using the ones from the XML response.

```
<on xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" ... >
  <script/>
  <header>
    <content>On - Updates: Sources</content>
    <created>2024-08-23T00:38:44Z</created>
    <copyright>Copyright 2024 Gracenote, a Nielsen Company. ... </copyright>
    <requestParameters>
      <requestParameter name="updateId">0</requestParameter>
      <requestParameter name="limit">10</requestParameter>
    </requestParameters>
    <streamData>
      <nextUpdateId>4250128775</nextUpdateId>
```

```
<maxUpdateId>6722796218</maxUpdateId>
</streamData>
</header>
<sources>
...
</sources>
</on>
```

## Update Process

For each endpoint:

1. For the seeding/“cold start”, begin fetching data by requesting with parameter `updateId=0`.
2. Iterate through all updates by using the `nextUpdateId` value as the request parameter for the next call. The last iteration (end of stream) is indicated by not returning any `nextUpdateId` value.
3. Having reached the end of the data stream, go idle and start requesting updates (step #2) sometime later using the stored `maxUpdateId + 1` value. See “Data Update Frequency” below for guidance on the idle time.
4. If API/download errors are encountered, wait and retry up to N times, then exit if error persists; note the `nextUpdateId` from the last successfully fetched response as the `updateId` from which to resume fetching - assuming responses prior to encountering the error will have been processed/ingested.

The top-level objects in each endpoint carry identifier field(s) allowing to uniquely identify them, along with the `updateId` and `updateDate`. The objects are provided in their entirety and should replace older existing objects (with lesser `updateId`) in the customer database / store. It is recommended to store `updateId` and `updateDate` along with the objects.

There may be multiple instances (different `updateIds`) of the same object (same identifier) in a single download session - the instance with the largest/latest `updateId` should be used. There should not be object duplicates (same identifier, same `updateId`) in a single download session, but if this may cause an issue downstream (e.g. attempt to insert duplicate key), we recommend validating against such a scenario.

For object deletion / inactivation, please see [Removals \(Object Deletion / Inactivation\) \(page 11\)](#)

For updates to Imagery, please see [Managing Image Updates and Deletes \(page 24\)](#)

### *Endpoint Update Sequence*

Endpoints can be retrieved sequentially in any order, though because they update asynchronously, it may be beneficial to e.g. retrieve Programs prior to Schedules to maximize (Schedules->Programs) referential integrity.

Endpoints can also be retrieved in parallel. With parallel endpoint retrieval, the On API QPS limits may result in some calls returning HTTP 403 “Over QPS limit” errors. The recommended approach is either to wait and retry (up to N times) on HTTP 403 error, or to implement QPS throttling. Contact your Gracenote representative if you need more details about this scenario.

Sequential retrieval of endpoints is highly unlikely to trigger “Over QPS limit” error, unless the requests set the limit parameter significantly below recommended value which is 1000 for most endpoints.

Gracenote does not support parallel retrieval on a single endpoint using the nextUpdateId value returned in the response header (while payload download is still in progress).

### *Data Update Frequency*

Data is continuously being added to / updated in the Gracenote systems, and made available via the On API. The client sessions retrieve, process and ingest the endpoint data until encountering the end-of-stream. Depending on your use cases, the session interval for your implementation may be smaller (from 15 min to 1 hr) or larger (e.g. 1 day). For most linear schedule/streaming use cases, an hourly session cadence should be sufficient. The new session should start only if the previous session has finished (on the same endpoint).

For information on expected update volume, see the [System Requirements \(page 19\)](#) section.

## Reseeding

For periodic database refresh, restart API ingestion from `updateId=0`. The On API data stream only maintains the newest (highest `updateId`) version of an object, so it will not be streaming through every historical update. However, depending on the size of the API stream / entitlement, the data reseeding via the API can be a lengthy process. Reseeding may be necessary if Gracenote enables a new attribute on existing objects in an endpoint (e.g. video descriptors on programs). When done for a specific client stream, this action typically does not trigger object updates on the endpoint.

## Removals (Object Deletion / Inactivation)

On API uses two attributes to indicate when updates for a record stop being available in a certain endpoint:

- “deleted=true” (referred to as “delete” below)
- “inactive=true” (referred to as “inactive” below)

```
<program TMSId=... updateId="77374268383" deleted="true" updateDate="2024-06-18T13:50:30Z">  
<program TMSId=... updateId="78878358803" inactive="true" updateDate="2024-07-25T01:39:16Z">
```

Most endpoints use the deleted attribute only. Exceptions are:

- The Programs endpoint uses both delete and inactive attributes.
- Schedule endpoint provides data in “schedule-days” (one UTC day schedule for a single channel). If a schedule-day is outside of your entitled EPG time window, the On API will automatically stop publishing updates for those days. Schedule endpoint does not use deletes and you can decide within the limits of your contract when to remove the old schedule records from your databases.
- Images provided within Programs, Celebrities, Sources and other endpoints, use a separate set of attributes to signal updates and deletions. See [Managing Image Updates and Deletes \(page 24\)](#).
- While not strictly an entity removal, channel positions in [Lineups Endpoint \(page 59\)](#) endpoint use an expiration date.

## Processing Deleted Records

The deleted attribute indicates that the record and its ID have been removed from Gracenote's database, or removed from your entitlement. You will no longer receive updates for the deleted record.

### Guidelines

- Generally, remove the record from your database.
- Alternatively, if your use case assumes references to old records, you can keep the record marked as "deleted" in your database.

### Ensuring Referential Integrity

- Sometimes, deleted records may still be referenced in other endpoints due to asynchronicity of the API. In these cases, consider postponing removing the record until all other references are updated.
- If references exist in archived data, you may choose to keep deleted records in your database.

Records flagged as deleted are retained in the On API stream for a certain time period, in the same state as at the time of deletion. As a result, these records may still be returned during lookups or reseeding. This supports history and transparency of the changes.

Endpoint	Deleted flag meaning	Days Retained
Celebrities	The Person record has been deleted from the Gracenote database.	Forever
ControlledVocabulary	The Controlled Vocabulary record is deleted from the Gracenote database.	Forever
Lineups	The Lineup record has been deleted from the Gracenote database or removed from customer entitlement.	60 days
Organizations	The Organization record has been deleted	Forever

Endpoint	Deleted flag meaning	Days Retained
	from the Gracenote database.	
ProgramAnnotations	The Video Descriptors for a program have been deleted from the Gracenote database or the program was removed from customer entitlement.	60 days
ProgramAvailabilities	The video represented by the Program Availability record has expired, was remapped to another program, removed from streaming catalog, or catalog was removed from customer entitlement.	60 days
ProgramMappings	The Program mapping was deleted from the Gracenote database or catalog was removed from customer entitlement.	60 days
Programs	The Program was deleted from the Gracenote database or the streaming catalog that contains the Program was removed from your entitlement.	60 days
Sources	The Source/station has been deleted from the Gracenote database or from your entitlement. There should be no further schedule updates for the source.	60 days
Teams	The Team record has been deleted from the Gracenote database.	Forever
Universities	The Universities record has been deleted from the Gracenote database.	Forever
Venues	The Venues record has been deleted from the Gracenote database.	Forever
VideoDescriptorsTaxonomy	The VideoDescriptorsTaxonomy record has been deleted from the Gracenote database.	Forever
VideoPopularity	The VideoPopularity record has been deleted from the Gracenote database.	15 days





**Important:** Identifiers are not reused for different objects. However, a record and its same identifier may reappear in certain cases, including after an erroneous deletion, re-entitlement of a streaming catalog, or after remapping of a streaming asset to the same program (for ProgramAvailabilities endpoint).

When a record is flagged as deleted, the body of the XML may or may not display information previously available for that record. The deleted record will persist in the output and will not be purged for a preset number of days (see Days Retained above). In some cases, the XML of “deleted” records may stop conforming to the XSD schema. Therefore, we recommend not validating “deleted” records

### Deleted Record Example

```
<program TMSId="EP000000351352" rootId="13813823" deleted="true"
connectorId="SH000000350000" seasonId="13314474" seriesId="184224" updateId="53343177"
updateDate="2017-04-21T04:51:13Z" >
  <titles lang="en">
    <title size="120" type="full" subType="Main" lang="en">60 Minutes</title>
  ...
</program>
```

### *Processing an Inactive Program*

The inactive=true indicates that the Program was removed from your entitlement, generally due to not being referenced on a linear schedule or in streaming catalogs. You will no longer receive updates, but the Program can reappear in the endpoint in the future (i.e. become active again with a new updateId).

Endpoint	inactive="true"	Days Retained
Programs	Program record is no longer referenced on linear schedules or in streaming catalogs and/or has been removed from your entitlement	60 days

### Guidelines

Generally, retain the Program but mark it as "inactive". You may choose to remove the record from your database or retain it if your use case references older programs. Programs that are flagged as inactive are retained in the On API stream for 60 days in the same state as when inactivated. As a result, these Programs will still be returned during lookups or reseeding within this period. This supports history and transparency of the changes. Inactive Programs can become active again and resume receiving regular updates.

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## Getting Seed Files

Upon request, Gracenote can provide seed data files via SFTP or S3. They can be used for:

- Initial seeding of the database (Cold Start)
- Fast rebuild of the database (Disaster Recovery)
- Periodic database refresh (Re-seeding)

The seed files delivery batch includes:

- For each endpoint
- File ending in `xml.gz`: File containing all of the endpoint's entitled data in the same XML format as the API responses, gzipped for compression
- File ending in `xml.gz.sig`: Signature file (MD5 checksum of the gzipped file) to help ensure that you have the complete data file available
- Manifest XML file which outlines the files that are delivered in one batch, with their names, their `maxUpdateIds`, and the count of records in each file.

All file names will contain a `YYYYMMDD_NNNNNNNNNN` formatted timestamp. There can be more than one batch on the SFTP server - choose the latest timestamp for ingestion. The batches are built at the requested frequency (typically weekly).

Parse the manifest file first to automatically gather the file names and `maxUpdateIds` that are part of the current batch. Use the `.sig` files to ensure that you have the complete endpoint XML file before starting parsing.

Files ending in `.tmp` are in the process of being uploaded and will be renamed after the upload is complete. If a file still has a `.tmp` extension, there may have been a connection issue while it was uploading - retry the download process if that happens.

After loading the seed files, use the On API endpoints to retrieve newer updates starting with the `maxUpdateIds` specified in the Manifest file.

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## System Requirements

The more Gracenote data you license, the more objects/updates there will be to process. Programs are the largest entities and their overall number in the entitlement will contribute the most to the volume of downloaded data and daily updates. Notably, entitlements with the Program Database (vs Linear/Streaming only) will have a significant volume of Programs. Schedules are updated at least once daily per source (a new schedule day is added), and also provide updates to already delivered schedule days. Streaming catalogs vary in update activity, some might be churning more than others. Many updates are triggered by the schedule or catalog providers and not by Gracenote directly.

The following table lists a few basic metrics (total object count, total data size\*, updates per day) for several sample API streams. While your specific stream numbers may differ, this should provide a rough guideline for appropriately sizing the system.

- Stream A: linear schedule for ~3k sources with referenced programs
- Stream B: linear schedule for ~1k sources, ~30 streaming catalogs, referenced programs
- Stream C: linear schedule for ~10k sources, ~15 streaming catalogs, referenced programs plus program database for US (description languages: en, es)

Endpoint	Sources	Schedules	Programs	Availabilities									
Metric	obj count	data size*	upd/day	obj count	data size*	upd/day	obj count	data size*	upd/day	obj count	data size*	upd/day	obj count
Stream A	3.2K	13MB	100	45K	0.8 GB	17 K	1.2 5M	12G B	23 K				
Stream B	0.9K	4MB	37	15K	0.4 GB	7. 5K	2.3 M	39 GB	35 K	0.8 7M	2.5 GB	29 K	
Stream C	10K	7MB	230	194K	3.1 GB	40 K	19. 5M	170 GB	10 0K	1.3 7M	3.3 GB	10 8K	

\* measured on a Postgres DB with data ingested using [Product Demonstration Kit \(PDK\) \(page 229\)](#)

Data for some endpoints is always provided in full regardless of the entitlements - the largest such endpoint being Celebrities (~2M objects, ~6GB data size, ~3.5K daily updates).

Especially during implementation, please consider storing the received XML responses locally instead of discarding them after ingestion. This helps troubleshooting and, if needed, allows rebuilding your database from scratch in a convenient and fast way (data download is typically the longest part of the ingest process).

## Update Surges

Update surges can occur with or without announcement. Examples:

- A streaming catalog provider replaces all deep links for existing video assets in their catalog. Gracenote will process this and provide an according surge of updates in the [Program Availabilities Endpoint \(page 149\)](#) endpoint. The actual number of updates will depend on the size of the catalog.
- New lineups/sources/catalogs are added to or removed from the client entitlement resulting in a surge of updates.

- Gracernote adds a new data element and reseeds the affected endpoint(s). This will typically be communicated to the clients beforehand via notifications.



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## Images (Media Cloud)

Gracenote Media Cloud is a commercial service that provides on-demand delivery of entertainment images to Gracenote customers. This service is based on a scalable and reliable Content Delivery Network (CDN) platform that has served billions of images.

### *Image URL Subdomain*

Image references are included in many top-level API entities, e.g. Programs. Most image references are output as partial paths and must be prefixed with the Media Cloud subdomain to retrieve image content; exceptions are certain [Celebrity Images \(page 137\)](#)

This is referenced below as <ClientSubdomain> and will be provided by the Gracenote team once the client is ready for production service. The `api_key` parameter is not used in the Production environment and will be ignored if included.

To download an image from the Media Cloud CDN use this format:

```
https://<ClientSubdomain>.tmsimg.com/<image URI>
```

Example: For the <URI>`assets/p13755451_i_s4_af.jpg`</URI>, prefix it with the base URL including your Media Cloud subdomain:

```
https://<ClientSubdomain>.tmsimg.com/assets/p13755451_i_s4_af.jpg
```

Contact your Gracenote representative for more information about your Media Cloud custom subdomain.

### *Image Download vs Passthrough Usage*

For use cases that involve providing images at scale (such as display in end-user applications/devices), the images must be downloaded and served from the customer CDN. Direct/passthrough usage of Media Cloud from clients can be supported for smaller scale implementations but should be cached via e.g. a

reverse proxy. Passthrough usage may incur overage fees depending on the individual commercial terms. Contact your Gracenote representative for more information about your Media Cloud usage limits.

## Dynamic Image Resizing

API entity images reference the largest available image size. Media Cloud supports resizing of images which can be used to get smaller image sizes by specifying either w (width) or h (height) parameter:

```
https://demo.tmsimg.com/assets/p184852_i_h2_ag.jpg?h=300
https://demo.tmsimg.com/assets/p184852_i_h2_ag.jpg?w=400
```

It is not possible to change the aspect ratio by providing both parameters. If both parameters are provided, only the first one will be used. Dynamic resizing can add latency to the image call.

## Managing Image Updates and Deletes

The API entities provide a full set of images in each entity update. The recommendation is to swap out the current set of assets with the incoming set. If your use case requires tracking image updates and/or deletions, use the following asset tag attributes:

```
<asset assetId="p13755451_i_s4_af" lastModified="2023-10-25T19:04:02Z"
  type="image/jpeg" width="3000" height="3000"
  primary="true" category="Iconic" ratio="1:1" tier="Series"
  expiredDate="2023-10-25T19:03:46Z">
  <URI>assets/p13755451_i_s4_af.jpg</URI>
</asset>
```

Attribute	Guidelines
asset/@assetId	Update of the underlying image asset results in a new assetId
asset/@lastModified	Last modified date of image asset. If assetId is not changed, indicates a change in asset metadata
asset/@expiredDate	Expiration date of image, indicates the image is deprecated and should not be used past the date

Attribute	Guidelines
asset/@updateId	Do not use
asset/@deleted	Do not use. Image delete is signaled either via removal of asset element or via expiredDate attribute

Image updates are primarily signaled by a new assetId and a new lastModified date. The lastModified date may also change without changing the assetId if the other asset tag attributes change. Expired images include the expiredDate attribute and should not be used past the expiration date.

Image deletions are signaled implicitly either by the removal of the asset from the list or by setting the expiredDate. Typically the expiredDate is set on the day of the image deletion; the asset may remain in the list but will eventually be purged. The asset may also simply get removed from the list.

### *Image Types and Properties*

For a table of supported image types and their properties see [Image Types \(page 29\)](#).

### *Image References*

Image references are included in all top-level elements, with exception of Schedules and Venues. Image references are output as partial paths. You must preface these paths with your Media Cloud subdomain to retrieve image content. Contact your Gracenote representative for more information about your Media Cloud custom subdomain, if needed.

Program images are provided at a normalized program-specific level. For TV shows, this means that series-level and season-level images will only be included on the series program record (TMSIDs beginning with SH). Series and season level images will not be repeated on each episode program record; the connectorId and seasonId on the episode should be used to link to the appropriate series/season level images. Episodes may contain their own episode-specific imagery.

Source images include TV station logos for the station itself, or if station is a local affiliate of broadcast or cable network, the network logo is included directly on the local station record.

Celebrity Images include standard headshots of celebrities.

Sports images for Organizations (leagues), Teams, and Universities represent standard logos for those entities. University logos are included once for each University and are not repeated within the Team record; college teams include a universityId reference which allows links to the appropriate university logo.

### *Handling Special Imagery*

In addition to the default program images, Gracenote may provide special program images of the following types:

- Restricted (by a content provider)
- Branded (with a source/network logo)
- Market (specific to a country)

Gracenote enables special imagery through entitlements and provides these images, with distinguishing attributes alongside the default imagery. You can use these attributes preferentially or exclusively to select the special imagery. You may want to implement configurable parameters allowing you to update image preference rules without code changes. This makes it easier to support future changes in image selection logic as licensing agreements change.

### *Restricted Imagery*

In some cases, Gracenote delivers certain restricted images from content providers. Restricted images are from a specific source/provider that wants them to be delivered only to customers with a contractual agreement to use these images. These images contain a specific string in the "provider" attribute of the asset tag. You can choose to parametrize, at a country level, the applicable provider string(s), as well as whether to prefer restricted imagery, or use it exclusively discarding default imagery, per provider.

### *Branded Imagery*

Some sources provide Gracenote with program imagery containing their network logo. These images are available for use on the corresponding linear channels (network and affiliates). The images contain an <identifiers> block with the prgSvclds of the linear channels in question. It is up to you to display these images. You can choose to parametrize, at a source or a country level, to prefer branded imagery or default imagery.

### *Market Imagery*

Some sources provide Gracenote with imagery that differs in their market from the imagery Gracenote has collected, usually for the default market or first market in which the program was available or for which the program was produced. These images contain an <identifiers> block with the valid market. The customers should always use market over default imagery if available for the given country of the viewer.

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## Image Types

The table below lists possible image types and their properties.

### Notes:

- Branded banners: On 2.4 and On API (Q1 2019) also include references to branded images when available. Image types remains the same but other identifiers are included in the asset metadata indicating the programming service logo that is included on the image.
- Market Specific banners: Products can include references to an image when it varies by market. Image types remain the same but other identifiers are included with the asset metadata indicating the country/countries to use the image for.
- Source Logos and Parent Source Logos: Source logo types can be either Source Logo or Parent Source Logo. The type starts with Parent when the logo delivered is the programming service's parent logo and the actual source logo is not available.

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
Backdrop	Program Program Type:  Show  Season  Movie	No	Right justified, full-frame art for a movie, show or season.	16:9	largest size available per aspect ratio	H8 (3840x2160) H10 (1920x1080) H11 (1280x720)	<a href="http://demo.tmsimg.com/assets/p15251011_bd_h8_ab.jpg">http://demo.tmsimg.com/assets/p15251011_bd_h8_ab.jpg</a>



Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
	Sport						
Banner-L1	Program	Yes	Artwork with official title treatment and occasionally actors names and taglines.	16:9	largest size available per aspect ratio	H8 (3840x2160) H10 (1920x1080) H11 (1280x720) H12 (960x540) H13 (480x270) H14 (240x135)	<a href="http://demo.tmsimg.com/assets/p15695601_b_h10_aa.jpg">http://demo.tmsimg.com/assets/p15695601_b_h10_aa.jpg</a>
	Program Type: Show Season Episode Movie Sport Sport Event Theatre Event			4:3	largest size available per aspect ratio	H9 (1440x1080) H6 (720x540) H3 (360x270) h4 (180x135)	<a href="http://demo.tmsimg.com/assets/p15695601_b_h9_aa.jpg">http://demo.tmsimg.com/assets/p15695601_b_h9_aa.jpg</a>
				3:4	largest size	V13 (2160x2880)	<a href="http://demo.tmsimg.com/assets/p15695601_b_v9_aa.jpg">http://demo.tmsimg.com/assets/p15695601_b_v9_aa.jpg</a>

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
					available per aspect ratio	V10 (1536x2048) V9 (1080x1440) V4 (540x720) V3 (270x360) V2 (135x180)	<a href="http://demo.tmsimg.com/assets/p15695601_b_v8_aa.jpg">http://demo.tmsimg.com/assets/p15695601_b_v8_aa.jpg</a>
				2:3	largest size available per aspect ratio	V12 (1920x2880) V11 (1280x1920) V8 (960x1440) V7 (480x720) V5 (240x360) V6 (120x180)	
				2:1	largest	H2	<a href="http://demo.tmsimg.com/assets/p15695601_b_v8_aa.jpg">http://demo.tmsimg.com/assets/p15695601_b_v8_aa.jpg</a>

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
Banner-L2	Program Program Type: Show Season Episode	Yes	Artwork with a Gracenote created title treatment		size available per aspect ratio	(2048x1024) H1 (1024x512)	b_h2_aa.jpg
				1:1	largest size available per aspect ratio	S4 (3000x3000) S3 (2000x2000) S2 (1400x1400) S1 (700x700)	<a href="http://demo.tmsimg.com/assets/p15695601_b_s2_aa.jpg">http://demo.tmsimg.com/assets/p15695601_b_s2_aa.jpg</a>
				16:9	largest size available per aspect ratio	H8 (3840x2160) H10 (1920x1080) H11 (1280x720)	<a href="http://demo.tmsimg.com/assets/p14653712_b_h8_am.jpg">http://demo.tmsimg.com/assets/p14653712_b_h8_am.jpg</a>

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
	Movie Sport Sport Event Theatre Event					H12 (960x540) H13 (480x270) H14 (240x135)	
				4:3	largest size available per aspect ratio	H9 (1440x1080) H6 (720x540) H3 (360x270) h4 (180x135)	<a href="http://demo.tmsimg.com/assets/p14653712_b_h9_am.jpg">http://demo.tmsimg.com/assets/p14653712_b_h9_am.jpg</a>
				3:4	largest size available per aspect ratio	V13 (2160x2880) V10 (1536x2048) V9 (1080x1440) V4 (540x720) V3 (270x360)	<a href="http://demo.tmsimg.com/assets/p14653712_b_v9_am.jpg">http://demo.tmsimg.com/assets/p14653712_b_v9_am.jpg</a>

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
						V2 (135x180)	

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
				2:3	largest size available per aspect ratio	V12 (1920x2880) V11 (1280x1920) V8 (960x1440) V7 (480x720) V5 (240x360) V6 (120x180)	<a href="http://demo.tmsimg.com/assets/p14653712_b_v8_am.jpg">http://demo.tmsimg.com/assets/p14653712_b_v8_am.jpg</a>
				2:1	largest size available per aspect ratio	H2 (2048x1024) H1 (1024x512)	<a href="http://demo.tmsimg.com/assets/p14653712_b_h2_am.jpg">http://demo.tmsimg.com/assets/p14653712_b_h2_am.jpg</a>
				1:1	largest size available per	S4 (3000x3000) S3	<a href="http://demo.tmsimg.com/assets/p14653712_b_s4_am.jpg">http://demo.tmsimg.com/assets/p14653712_b_s4_am.jpg</a>

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
Iconic	Program Program Type: Show Season Episode Movie Sport Sport Event Theatre Event	No	A representative image for a movie, show, season or episode. For shows and seasons it is typically the official promotional artwork without text. For movies and episodes it is a scene still		aspect ratio	(2000x2000) S2 (1400x1400) S1 (700x700)	
				16:9	largest size available per aspect ratio	H8 (3840x2160) H10 (1920x1080) H11 (1280x720) H12 (960x540) H13 (480x270) H14 (240x135)	<a href="http://demo.tmsimg.com/assets/p93.2002_i_h10_ab.jpg">http://demo.tmsimg.com/assets/p93.2002_i_h10_ab.jpg</a>
				4:3	largest size available per	H9 (1440x1080) H6 (720x540)	<a href="http://demo.tmsimg.com/assets/p93.2002_i_h9_ab.jpg">http://demo.tmsimg.com/assets/p93.2002_i_h9_ab.jpg</a>

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
					aspect ratio	H3 (360x270) h4 (180x135)	
				3:4	largest size available per aspect ratio	V13 (2160x2880) V10 (1536x2048) V9 (1080x1440) V4 (540x720) V3 (270x360) V2 (135x180)	<a href="http://demo.tmsimg.com/assets/p93.2002_i_v9_ab.jpg">http://demo.tmsimg.com/assets/p93.2002_i_v9_ab.jpg</a>
				2:3	largest size available per aspect ratio	V12 (1920x2880) V11 (1280x1920) V8 (960x1440)	<a href="http://demo.tmsimg.com/assets/p93.2002_i_v8_ab.jpg">http://demo.tmsimg.com/assets/p93.2002_i_v8_ab.jpg</a>



Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
						V7 (480x720) V5 (240x360) V6 (120x180)	
				2:1	largest size available per aspect ratio	H2 (2048x1024) H1 (1024x512)	<a href="http://demo.tmsimg.com/assets/p93.2002_i_h2_ab.jpg">http://demo.tmsimg.com/assets/p93.2002_i_h2_ab.jpg</a>
				1:1	largest size available per aspect ratio	S4 (3000x3000) S3 (2000x2000) S2 (1400x1400) S1 (700x700)	<a href="http://demo.tmsimg.com/assets/p93.2002_i_s2_aa.jpg">http://demo.tmsimg.com/assets/p93.2002_i_s2_aa.jpg</a>
Key Art	Program	No	Official artwork	16:9	largest	H8	<a href="http://demo.tmsimg.com/assets/p12543972_">http://demo.tmsimg.com/assets/p12543972_</a>

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
	Program Type: Movie		with no title treatment overlay		size available per aspect ratio	(3840x2160) H10 (1920x1080) H11 (1280x720) H12 (960x540) H13 (480x270) H14 (240x135)	k_h8_aa.jpg
				3:4	largest size available per aspect ratio	V13 (2160x2880) V10 (1536x2048) V9 (1080x1440) V4 (540x720) V3 (270x360)	<a href="http://demo.tmsimg.com/assets/p12543972_k_v10_aa.jpg">http://demo.tmsimg.com/assets/p12543972_k_v10_aa.jpg</a>

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
						V2 (135x180)	

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
				2:3	largest size available per aspect ratio	V12 (1920x2880) V11 (1280x1920) V8 (960x1440) V7 (480x720) V5 (240x360) V6 (120x180)	<a href="http://demo.tmsimg.com/assets/p12543972_k_v8_aa.jpg">http://demo.tmsimg.com/assets/p12543972_k_v8_aa.jpg</a>
				2:1	largest size available per aspect ratio	H2 (2048x1024) H1 (1024x512)	<a href="http://demo.tmsimg.com/assets/p12543972_k_h2_aa.jpg">http://demo.tmsimg.com/assets/p12543972_k_h2_aa.jpg</a>
				1:1	largest size available per	S4 (3000x3000) S3	<a href="http://demo.tmsimg.com/assets/p16298_k_s2_ab.jpg">http://demo.tmsimg.com/assets/p16298_k_s2_ab.jpg</a>

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
					aspect ratio	(2000x2000) S2 (1400x1400) S1 (700x700)	
Staple	Program Program Type: Movie Show	Yes	Systematically generated banner consisting of a genre based background image and program title text.	16:9	largest size available per aspect ratio	H8 (3840x2160) H10 (1920x1080) H11 (1280x720) H12 (960x540) H13 (480x270) H14 (240x135)	<a href="http://demo.tmsimg.com/assets/p14170941_st_h10_aa.jpg">http://demo.tmsimg.com/assets/p14170941_st_h10_aa.jpg</a>
				4:3	largest size available per	H9 (1440x1080) H6 (720x540)	<a href="http://demo.tmsimg.com/assets/p14170941_st_h9_aa.jpg">http://demo.tmsimg.com/assets/p14170941_st_h9_aa.jpg</a>

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
					aspect ratio	H3 (360x270) h4 (180x135)	
				3:4	largest size available per aspect ratio	V13 (2160x2880) V10 (1536x2048) V9 (1080x1440) V4 (540x720) V3 (270x360) V2 (135x180)	<a href="http://demo.tmsimg.com/assets/p14170941_st_v9_aa.jpg">http://demo.tmsimg.com/assets/p14170941_st_v9_aa.jpg</a>
				2:3	largest size available per aspect ratio	V12 (1920x2880) V11 (1280x1920) V8 (960x1440)	<a href="http://demo.tmsimg.com/assets/p14170941_st_v8_aa.jpg">http://demo.tmsimg.com/assets/p14170941_st_v8_aa.jpg</a>

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
						V7 (480x720) V5 (240x360) V6 (120x180)	
VOD Art	Program Program Type: Movie	Yes	Movie promotional artwork with official title treatment and occasionally actors names and taglines.	16:9	largest size available per aspect ratio	H8 (3840x2160) H10 (1920x1080) H11 (1280x720) H12 (960x540) H13 (480x270) H14 (240x135)	<a href="http://demo.tmsimg.com/assets/p15718773_v_h10_am.jpg">http://demo.tmsimg.com/assets/p15718773_v_h10_am.jpg</a>
				3:4	largest size available per aspect	V13 (2160x2880) V10 (1536x2048)	<a href="http://demo.tmsimg.com/assets/p15718773_v_v9_am.jpg">http://demo.tmsimg.com/assets/p15718773_v_v9_am.jpg</a>

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
					ratio	V9 (1080x1440) V4 (540x720) V3 (270x360) V2 (135x180)	
				2:3	largest size available per aspect ratio	V12 (1920x2880) V11 (1280x1920) V8 (960x1440) V7 (480x720) V5 (240x360) V6 (120x180)	<a href="http://demo.tmsimg.com/assets/p15718773_v_v8_am.jpg">http://demo.tmsimg.com/assets/p15718773_v_v8_am.jpg</a>
				2:1	largest size available	H2 (2048x1024) H1 (1024x512)	<a href="http://demo.tmsimg.com/assets/p15718773_v_h2_am.jpg">http://demo.tmsimg.com/assets/p15718773_v_h2_am.jpg</a>



Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
					per aspect ratio		
				1:1	largest size available per aspect ratio	S4 (3000x3000) S3 (2000x2000) S2 (1400x1400) S1 (700x700)	<a href="http://demo.tmsimg.com/assets/p15718773_v_s2_am.jpg">http://demo.tmsimg.com/assets/p15718773_v_s2_am.jpg</a>
Poster Art	Program Program Type: Movie	Yes	Theatrical movie poster	3:4	largest size available per aspect ratio	V13 (2160x2880) V10 (1536x2048) V9 (1080x1440) V4 (540x720)	<a href="http://demo.tmsimg.com/assets/p8815512_p_v13_av.jpg">http://demo.tmsimg.com/assets/p8815512_p_v13_av.jpg</a>

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
						V3 (270x360) V2 (135x180)	<a href="http://demo.tmsimg.com/assets/p8815512_p_v12_ay.jpg">http://demo.tmsimg.com/assets/p8815512_p_v12_ay.jpg</a>
				2:3	largest size available per aspect ratio	V12 (1920x2880) V11 (1280x1920) V8 (960x1440) V7 (480x720) V5 (240x360) V6 (120x180)	
Title Treatment-dark	Program Program Type: Show Season Movie	Yes	Transparent program logo for use on a dark background, when provided by the studio or network.	9:5	largest size available per aspect ratio	H95 (1800 x 1000)	<a href="http://demo.tmsimg.com/assets/p11299808_ttd_h95_aa.png">http://demo.tmsimg.com/assets/p11299808_ttd_h95_aa.png</a>

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
	Sport						
Title Treatment-light	Program Program Type: Show Season Movie Sport	Yes	Transparent program logo for use on a light background, when provided by the studio or network.	9:5	largest size available per aspect ratio	H95 (1800 x 1000)	<a href="http://demo.tmsimg.com/assets/p13742448_ttl_h95_aa.png">http://demo.tmsimg.com/assets/p13742448_ttl_h95_aa.png</a>
Title Treatment-neutral	Program Program Type: Show Season Movie Sport	Yes	Transparent program logo for use on a light or dark background, when provided by the studio or network.	9:5	largest size available per aspect ratio	H95 (1800 x 1000)	<a href="http://demo.tmsimg.com/assets/p10745606_ttn_h95_aa.png">http://demo.tmsimg.com/assets/p10745606_ttn_h95_aa.png</a>
(Parent)* Source Logo - dark	programming service	n/a	Official logo for a channel, works	4:3	largest	H15 (3200x2400)	<a href="http://demo.tmsimg.com/assets/s24761_ld_h15_aa.png">http://demo.tmsimg.com/assets/s24761_ld_h15_aa.png</a>

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
			well on dark backgrounds.		size available per aspect ratio	H9 (1440x1080) H6 (720x540) H3 (360x270) h4 (180x135) H4 (90x67)	
(Parent)* Source Logo - light	programming service	n/a	Official logo for a channel, works well on light backgrounds.	4:3	largest size available per aspect ratio	H15 (3200x2400) H9 (1440x1080) H6 (720x540) H3 (360x270) h4 (180x135) H4 (90x67)	<a href="http://demo.tmsimg.com/assets/s24761_ll_h15_aa.png">http://demo.tmsimg.com/assets/s24761_ll_h15_aa.png</a>
(Parent)* Source Logo - gray	programming service	n/a	Official logo for a channel in	4:3	largest size	H15 (3200x2400)	<a href="http://demo.tmsimg.com/assets/s24761_lg_h15_aa.png">http://demo.tmsimg.com/assets/s24761_lg_h15_aa.png</a>

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
			grey.		available per aspect ratio	H9 (1440x1080) H6 (720x540) H3 (360x270) h4 (180x135) H4 (90x67)	
(Parent)* Source Logo - white	programming service	n/a	Official logo for a channel in white.	4:3	largest size available per aspect ratio	H15 (3200x2400) H9 (1440x1080) H6 (720x540) H3 (360x270) h4 (180x135) H4 (90x67)	<a href="http://demo.tmsimg.com/assets/s24761_lw_h15_aa.png">http://demo.tmsimg.com/assets/s24761_lw_h15_aa.png</a>
Logo	team, conference,	n/a	Official logo of a team,	4:3	largest size	H15 (3200x2400)	<a href="http://demo.tmsimg.com/assets/t6166_l_h15_ae.png">http://demo.tmsimg.com/assets/t6166_l_h15_ae.png</a>

Image Type	Valid for	Has Title Text	Description	Aspect Ratio	On API v3	Image Dimensions	Image Examples
	college, organization		conference, college or sport organization.		available per aspect ratio	H9 (1440x1080) H6 (720x540) H3 (360x270) h4 (180x135) H4 (90x67)	
Photo -headshot	person	No	Celebrity red carpet or other image.	3:4	largest size available per aspect ratio	V9 (1080x1440) V4 (540x720) V3 (270x360) V2 (135x180)	<a href="http://demo.tmsimg.com/assets/69369_v9_bc.jpg">http://demo.tmsimg.com/assets/69369_v9_bc.jpg</a>



**Note:** \* indicates that the source logo type starts with Parent when the logo delivered is the programming service's parent logo.

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## Implementation

This documentation is primarily for concepts and reference. You can find implementation instructions and examples in a separate guide available on the Gracernote Help Center: [Gracernote On API Implementation Guide](#)



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## Endpoint Overview

This section describes top-level endpoints for On API and links to sections for additional information.

Linear Endpoints	Description
<a href="#"><u>Lineups Endpoint (page 59)</u></a>	Channel lineups for video service providers and terrestrial broadcast services.
<a href="#"><u>Sources Endpoint (page 71)</u></a>	Information for programming services, identified by Gracenote programming service ID (prgSvcId).
<a href="#"><u>Schedules Endpoint (page 85)</u></a>	TV schedules, organized by station identifier (programming service ID, or prgSvcId) and UTC datetime.
<a href="#"><u>Programs Endpoint (page 97)</u></a>	TV and movie program information, organized by industry-standard TMSId for language-specific representation of programs.
<a href="#"><u>Celebrities Endpoint (page 129)</u></a>	Information about entertainment personalities, identified by Gracenote personId.

On Demand Endpoints	Description
<a href="#"><u>Program Availabilities Endpoint (page 149)</u></a>	Provides access to catalogs from online streaming providers like Amazon, Hulu etc.
<a href="#"><u>Program Mappings Endpoint (page 159)</u></a>	Mapping information for programs on customer VOD catalogs; includes TMSId mapping to customer-provided asset IDs

Advanced Discovery Endpoints	Description
<a href="#"><u>Program Annotations Endpoint (page 167)</u></a>	Contains Program Video Descriptors for programs to optimized for search and discovery use cases.
<a href="#"><u>Video Descriptors Taxonomy Endpoint (page 173)</u></a>	A structured hierarchical relationship (parent/child tree) between descriptors.
<a href="#"><u>Video Popularity Endpoint (page 187)</u></a>	Assigns a numeric score to TV series and movies that represents the majority of the population's level of recognition of a video program.

Sports Endpoints	Description
<a href="#"><u>Sports Endpoint (page 194)</u></a>	Sports metadata
<a href="#"><u>SportsEvents Endpoint (page 196)</u></a>	Sports events metadata
<a href="#"><u>Teams Endpoint (page 199)</u></a>	Team metadata
<a href="#"><u>Universities Endpoint (page 205)</u></a>	University metadata for use with sports teams.
<a href="#"><u>Venues Endpoint (page 209)</u></a>	Venue metadata.

GN IDS SourcePrograms Endpoint	Description
<a href="#"><u>GN IDS SourcePrograms Endpoint (page 221)</u></a>	SourcePrograms metadata for Gracenote ID Distribution System (GN IDS)

## Linear Schedules (Unbound) Endpoints

Linear TV Schedules (linear availability) refers to traditional broadcast television scheduling. It represents the predetermined sequence of programs on a TV station, organized by date and time.

Core Endpoint	Description
<a href="#">Lineups Endpoint (page 59)</a>	Channel lineups for video service providers and terrestrial broadcast services.
<a href="#">Sources Endpoint (page 71)</a>	Information for programming services, identified by Gracenote programming service ID (prgSvcId).
<a href="#">Schedules Endpoint (page 85)</a>	TV schedules, organized by station identifier (programming service ID, or prgSvcId) and UTC datetime.
<a href="#">Programs Endpoint (page 97)</a>	TV and movie program information, organized by industry-standard TMSId for language-specific representation of programs.
<a href="#">Celebrities Endpoint (page 129)</a>	Information about entertainment personalities, identified by Gracenote personId.



**Note:** For example responses see: [On API Example Responses \(page 227\)](#). For implementation guidelines, see the [Gracenote On API Implementation Guide](#).

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## Lineups Endpoint

The Lineups endpoint provides localized channel lineup metadata for live linear cable, satellite, terrestrial, and streaming services. Channel Lineups represent a list of stations for a video provider or service that is available in a specific country, geographic location, or postal code.

Over-the-air lineups provide a list of channels that can be received within a single postal code. Cable/Telco and Satellite lineups include a set of “headends” (physical facilities) that provide service for one or more postal codes. Each “headend” can contain one or more specific channel lineups identified by a device type.

Channel Lineups are a general representation of the localized list of channels for a specific service provider. They are not an exact list of channels that a user can receive or subscribe to, nor do they represent provider specific subscriptions or packages.

## API and Example Responses

The channel lineup record has two basic presentations:

- Over-the-Air (OTA, DIGITAL)
  - A single postal code is assigned for the terrestrial reception area.
  - List of station prgSvclDs and dial position number.
- Cable (CABLE, MVPD, SATELLITE, DIGITAL\_BROADCAST, IPTV, OTT, VIRTUAL)
  - One or many postal codes are assigned for the service area.
  - List of station prgSvclDs, dial position number, effective and expiration dates.

## API

```
http://on-api.gracenote.com/v3/Lineups
?updateId=[updateId value]
&limit=[10 max, values >10 are ignored]
&api_key=[your-API-key]
```

Parameter	Required?	Description
api_key	Yes	Your API key
updateId	No	Lineups modified at or after updateId.
limit	No	Batch size. Maximum number of lineups to be returned. Use with updateId. Maximum limit is 10.
id	No	<b>For non-batch lookups.</b> Accepts comma-separated list of Lineup Ids.



**Important:** Use lookup calls for QA and troubleshooting purposes only. Gracenote does not support lookup APIs for Client production environments.

### Response Body

Response	Description
country ID	the ID of the lineup country's isoCode as well as the isoCode value in line with the controlled vocabulary endpoint
type	type of service (e.g., Cable, Satellite, OTA)
lineup Id	alphanumeric id of the lineup (e.g., USA-CA00053-L)
headend Id	alphanumeric id of the headend (e.g., USA-CA00053)
headend	name of the provider (e.g., Charter Spectrum)
device type	service provider designation for device type (e.g., "L" – Rebuild digital)
location	location of headend, usually city name; for national lineups, location will be set to country name
mso	name of the multi-system operator, will not be present for small or independent providers or for certain lineup types (e.g., Virtual)
mso Id	numeric id of the multi-service operator (e.g., 13890)
market type	type of market – currently only supporting DMA

Response	Description
market Id	numeric id of the DMA market (e.g., 803)
market	name of the DMA market (e.g., Los Angeles)
postal codes	list of postal codes in which the service is available
channel list	list of channels that are part of the service, referenced by prgSvcId, including the channel number of the channel within the service

### Request Parameters

Parameter	Description
country	Country in which the lineups are located. Use the three character country value as based on the IETF BCP 47 standard.
postalCode	Individual, country specific postal code where this lineup is available.
api_key	Your API key

### Example Requests

Retrieve all lineups available for a single specific country and postal code.

[http://on-api.gracenote.com/v3/Lineups?country=USA&postalCode=12804&api\\_key=123456](http://on-api.gracenote.com/v3/Lineups?country=USA&postalCode=12804&api_key=123456)

#### *Best Practices*

- Use a proper 3-character country code from the IETF BCP 47 standard.
- Use a properly formatted country postal code.
- Be aware that your specific API key and entitlement will have constraints on the available countries/postal codes/lineups.

Retrieve all lineups available for a single specific headend ID.

[http://on-api.gracenote.com/v3/Lineups?headend=USA-SC39419&api\\_key=123456](http://on-api.gracenote.com/v3/Lineups?headend=USA-SC39419&api_key=123456)



### *Request Parameters*

Parameter	Description
headend	Gracenote unique ID of the headend.
api_key	Your API key

### *Best Practices*

- Use a headend value retired from your complete update method.
- Be aware that your specific API key and entitlement will have constraints on the available headends/lineups.

Retrieve a single lineup for a specific lineup ID.

[http://on-api.gracenote.com/v3/Lineups?id=USA-NY31579-X&api\\_key=123456](http://on-api.gracenote.com/v3/Lineups?id=USA-NY31579-X&api_key=123456)

### *Request Parameters*

Parameter	Description
id	Gracenote unique ID of a channel lineup.
api_key	Your API key

### *Best Practices*

- Use a lineup ID value retired from your complete update method.
- Be aware that your specific API key and entitlement will have constraints on the available lineups.

### Example Responses

See [Lineups XML examples](#).

## Data Structure and Relationships

### Schema

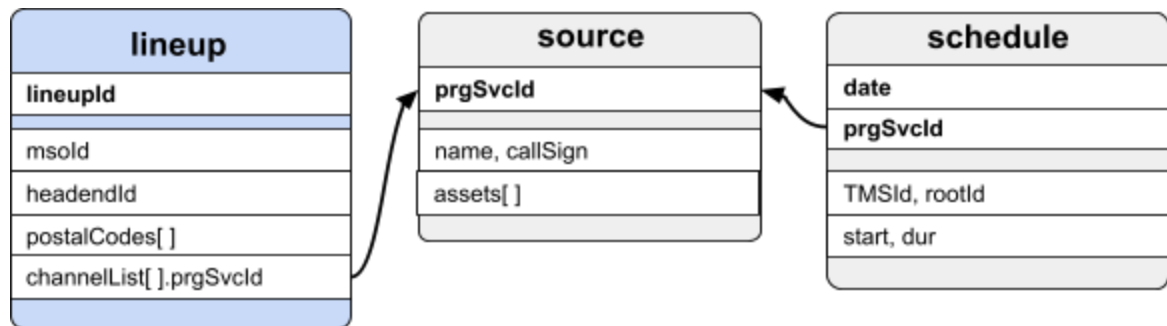
Review the following XML schema definition (xsd) to learn about the data structure, fields, and types for this endpoint.

To explore the relationships among all endpoints, see the [interactive schema documentation](#).

**XML schema URL:** [http://files.api.gracenote.com/xsd/on\\_update\\_lineups\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_lineups_3.23.xsd)

### Entity Relationship Diagram

The following ERD illustrates the ID relationships from a lineup record to other relevant endpoint objects within On API.



- The **lineupId** uniquely identifies each channel lineup.
  - It has no real relational value within the API and other objects.
- The **/channelList/channel/@prgSvcId** identifies the specific station in a lineup
  - The lineup **prgSvcId** can point to a source record **prgSvcId** for additional metadata such as callSign, channel name, and channel logo.
  - The channel list **prgSvcId** is also essential in collecting station schedules to create the program guide for the provider.

## Lineups Key Fields

Unless stated otherwise, the XPATH in the tables below is relative to:  
on/lineups/lineup

XPATH Element\Attribute	Description	Example
@id	Gracenote unique identifier of a channel lineup.	USA-CA00056-X
lineupInfo/country/	Lineup country. ISO 3166-1 alpha-3 country code	USA
lineupInfo/country/@countryId	Lineup country. ISO 3166-1 numeric country code	840
lineupInfo/mso/	MSO (multiple system operator) name.	Comcast Corporation
lineupInfo/mso/@msoid	Unique Gracenote identifier for the MSO	8010
lineupInfo/headend/	Name of the headend serving the channel lineup.	Xfinity
lineupInfo/headend/@headendId	Gracenote unique identifier of the headend.	USA-CA00056
lineupInfo/location/	City name of the headend location.	South San Francisco
lineupInfo/device/	Gracenote device type name of channel lineup.	Digital (non-rebuild)
lineupInfo/device/@type	Gracenote device type letter code of channel lineup.	X
lineupInfo/type/	Gracenote lineup service type.	CABLE
lineupInfo/markets/market/	Nielsen name of an individual market.	San Francisco-Oak-San Jose
lineupInfo/markets/market/@type	Nielsen market type.	DMA
lineupInfo/markets/market/@marketId	Nielsen market numeric code.	807

XPATH Element\Attribute	Description	Example
lineupInfo/postalCodes/postalCode/	Individual country postal code (s) where this lineup is available.	94014

### Lineup Types

Channel Lineups are available for the following types of video distribution services. Not all lineup types are present in all countries:

Lineup Type	Description
OTA	Over-the-air terrestrial lineup for analog broadcast stations.
DIGITAL	Over-the-air terrestrial lineup for digital broadcast stations (US/Canada)
DIGITAL_BROADCAST	Over-the-air terrestrial lineup for digital broadcast stations (outside of US/Canada)
CABLE	Lineup for service delivered by coaxial or fiber-optic cable.
SATELLITE	Lineup for direct-to-home satellite service.
IPTV	Lineup delivered over the internet via a privately-managed network.
OTT	Lineup delivered over open internet, for example for virtual MVPD "skinny bundle" linear channels
VIRTUAL	Gracenote provides a set of two virtual lineups for a subset of countries: a) Virtual country lineup (lineup name = country name) represents the most watched channels in country based on market share. b) Extended country lineup (lineup name = country name + "(extended)" in local language) represents a superset of all channels included in lineups of any other lineup type for given country

Specific channel lineup types (CABLE, SATELLITE, OTT) can also have an end user device type designation. The device type indicates the specific video service type of the lineup. e.g. "Cable/Digital Rebuild".

Device Type Code	Device Type	Description
<null>	<null>	No specific device type assigned
X	Digital	Lineup for set-top-box with digital service.
L	Digital Rebuild	Rebuild lineup (replacement) for set-top-box with digital service.

### Channel List

Unless stated otherwise, the XPATH in the table below is relative to:  
on/lineups/lineup/channelList/channel/

XPATH Element\Attribute	Description	Example
@prgSvcId	Gracenote unique identifier for the station (programming service)	96335
channelNumber/	Channel position number of the station in the lineup	017
channelNumber/@effectiveDate	Date that the channel at a specific dial position becomes active	2024-05-15
channelNumber/@expirationDate	Date that the channel at a specific dial position becomes inactive	2024-07-31
channelNumber/@tier	One of five levels of service (not a subscriber package)	1

Channel lineups are updated at a cadence appropriate for the market, lineup type, and provider. Updates can be on demand when sent by the provider, or once a month, or every three months etc. Channels that are added or deleted may be indicated by the effectiveDate and expirationDate attributes.

The same station can be present in the lineup on multiple channel positions. This is by design as providers typically have the same channel in multiple tiers and packages.

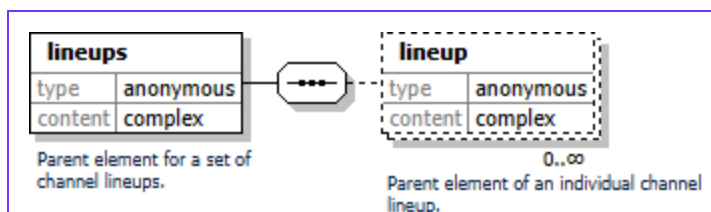
Channel tiers is a legacy construct that attempted to group stations by high level service groups. Tiers are not subscription packages - please refer to the [Supplemental Controlled Vocabulary](#) (auto-download) for tier definition.

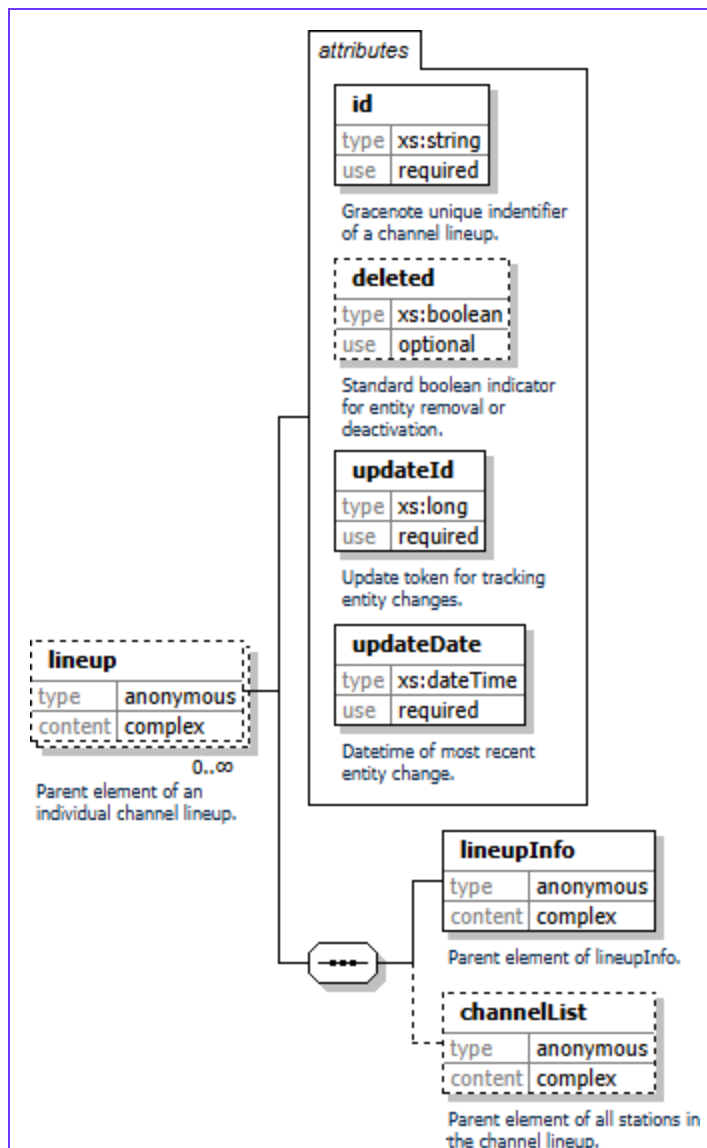
#### *Channel Transport Identifiers*

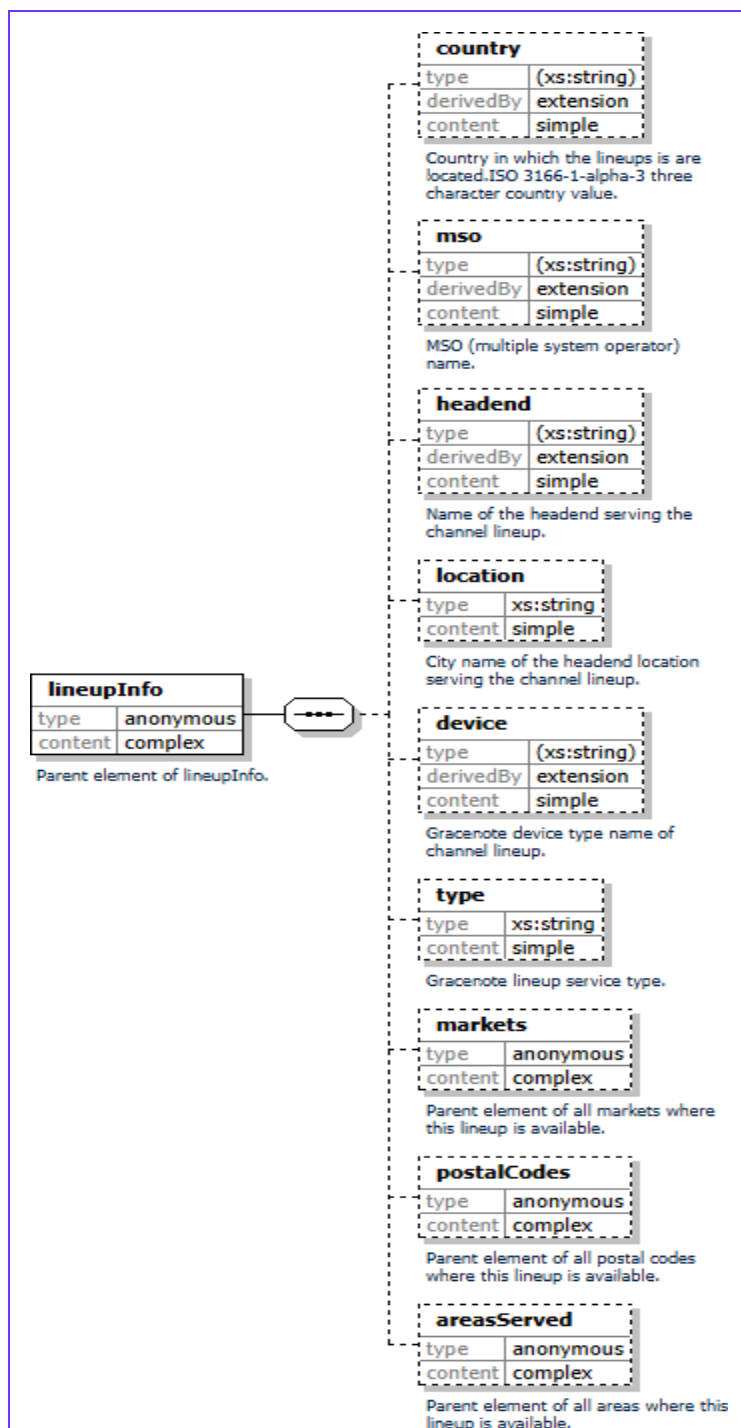
XPATH Element\Attribute	Description	Example
transportIds/transportId/system/	Transport id system	DVB
transportIds/transportId/subSystem/	Transport id sub-system	DVB-C
transportIds/transportId/idParts/idPart/id/	Transport id type	ONID, TSID, SID
transportIds/transportId/idParts/idPart/type/	Transport id value	9999, 411, 41101

Transport identifiers are transmitted in the broadcast signal of the channel and can be used to map broadcast channels to channels in EPG data. Depending on the country, different broadcast standards are in use - for example ATSC in North America, DVB in EU and ANZ, ISDB in most of LatAm and Japan. Gracenote currently supports DVB transports ids in certain EU countries and Australia at the lineup channel level. The DVB transport ids are composed of three distinct ID parts (ONID, TSID, SID) and are also referred to as DVB triplets.

#### Lineup Schema Diagrams









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## *Sources Endpoint*

The Sources endpoint is designed to retrieve Gracenote information for programming services, identified by Gracenote programming service ID (prgSvcId). The Sources schema provides station information, including:

- prgSvcId, for linking to Schedules API
- Station name and location
- callSign
- Broadcast languages
- HD/SD attributes
- Affiliations to broadcast and cable networks
- Nielsen DMA designations (USA)
- Station logos

All sources are marked with a unique updateId, denoting current information for the programming service. Changes to any source data will result in assignment of a new updateId, which allows you to pull deltas since last retrieval of source information. Scope of stations can be requested by particular country, lineup, custom station list, or a combination of criteria dependent on customer need. For example, you can request all active stations in USA and Mexico for your feed, and receive deltas for only those stations.

**Summary**

Channel Name	ESPN HD
Channel ID	32645
Call Sign	ESPNHD
Type	Satellite
Website	www.espn.com
Status	Edited
Timezone	America/New_York
Timezone Name	Eastern Observing
Countries of Coverage	USA, PRI
Video Quality	Digital
Attributes	Sports, Digital, HDTV
Edit Languages	English
Broadcast Languages	English
Location	Bristol, CT, 06010, USA

**Relationships**

Channel ID	Relationship Type
117789	Child (satellite) of
116265	Child (satellite) of
77568	Child (satellite) of
77572	Child (satellite) of
76795	Child (satellite) of
10179	HD Version of
116264	Child (satellite) of

## API and Example Responses

### API

```
http://on-api.gracenote.com/v3/Sources  
?updateId=[updateId value]  
&limit=[limit value]  
&api_key=[client assigned API key]
```

## Request Parameters

Parameter	Required?	Description
api_key	Yes	Your API key
updateId	No	Programming services modified at or after updateId.
limit	No	Batch size. Maximum number of programming services to be returned.
prgSvcId	No	<b>For non-batch lookups.</b> Comma-separated list of programming service IDs.



**Important:** Use lookup calls for QA and troubleshooting purposes only. Gracernote does not support lookup APIs for Client production environments.

## Example Responses

See [Sources XML examples](#).

## Data Structure and Relationships

### Schema

Review the following XML schema definition (xsd) to learn about the data structure, fields, and types for this endpoint.

To explore the relationships among all endpoints, see the [interactive schema documentation](#).

**XSD:** [http://files.api.gracernote.com/xsd/on\\_update\\_sources\\_3.23.xsd](http://files.api.gracernote.com/xsd/on_update_sources_3.23.xsd)

## Sources Key Fields

The following data dictionary shows the XPATH of key elements and attributes for source objects. Unless stated otherwise, the XPATH in the tables below is relative to: `on/sources/prgSvcs/prgSvc`

XPATH Element\Attribute	Description	Example
@prgSvcId	Gracenote unique identifier for a programming service	20459
name/	Name of the programming service	WNBC-DT
callSign/	Call sign of the programming service	WNBCTDT
timeZone/	Time zone that the station is edited in	Eastern Observing
ianaTimeZone/	The IANA time zone that the station is edited in	America/New York
videoQuality/signalType/	Transmission signal type used by the service.	Digital
edLangs/edLang/	RFC 5646 language code for an edit (guide metadata) language of this programming service.	en
bcastLangs/bcastLang/	RFC 5646 language code for a broadcast (spoken audio) language of this programming service.	en
countriesOfCoverage/country/	The ISO-3166 alpha-3 code for the country of coverage	USA
num/	Legacy RF channel number of the broadcast service	35
num/@majorNum	Major VCN (virtual channel number) of the broadcast service	5
num/@minorNum	Minor VCN (virtual channel number) of the broadcast service	1
marketIds/marketId/	Number code of the market ranking	510

XPATH Element\Attribute	Description	Example
	area in which the source is located.	
reach/	Used to broadly identify the extent of coverage on a given station: Local, Regional, National, International. See <a href="#">Supplemental Controlled Vocabulary</a> (auto-download) for full list/description.	Local

Source callsigns follow basic Gracenote standards for broadcast, cable, and satellite channels e.g. WNBC-DT or ESPN HD. Source channel names use the “official” name, or name and callsign requested by the source, e.g. PTV007 / Pluto TV 007 or SN1DFW / Spectrum News 1 - Dallas - Ft Worth. Source names can change.

### Source Type

The source type broadly describes the content of the programming service.

XPATH Element\Attribute	Description	Example
type/	Gracenote categorization of the service type.	Full Power Broadcast

Below are some common source types, see [Supplemental Controlled Vocabulary](#) (auto-download) for the full list:

Channel Type	Definition	Example
Broadband	Used for providers of on-demand Internet streaming media such as Hulu, Netflix, Amazon Studios, Crackle, Yahoo! Screen, etc.	HULU, NETOV, CRACKOV, AMZONOV
Cable Only	A custom or local channel created for a specific cable system and airs within a particular region.	CVCLF, BATCR11,

Channel Type	Definition	Example
Digital Broadcast Network	A service which operates as a digital broadcast TV network platform in which programming is primarily available to broadcast/over-the-air/terrestrial TV station affiliates 24 hours a day for digital sub-channel carriage, and this same information can also be made available directly to other multichannel video programming distribution services.	ANTENNA, DYSTR, METVN
Full Power Broadcast	U.S. definition: A full-power, over-the-air channel operating and following licensing regulations for the FCC.	WABC-DT, WNBC-DT
Low Power Broadcast	U.S. definition: A channel licensed by the FCC as a low-power, secondary television service.	WNYN-LD, WNYF-CD
Network	U.S. definition: a "Network" is a program distributor which distributes more than 15 hours of prime time programming a week to at least 25 affiliates in at least 10 states for the U.S.	ABC, NBC, CBS
Radio Station	A channel transmitting over-the-air radio audio.	KBSGFM, MSLXM
Satellite	A channel whose programming is available direct from satellite or cable to consumers. Programming is not available over-the-air.	HBO, DSC, FOOD
Streaming	Gracenote definition: A channel whose programming is broadcast on the Internet in a linear fashion.	AESTR, SHOWSTR, IFCSTR

### Attributes

Source attributes broadly describe the transmission method, default definition standard, and indication of non-standard programming/content.

XPATH Element\Attribute	Description	Example
attrs/attrib/	Attribute(s) describing the programming service.	Digital, HDTV

Below are some common source attributes, see [Supplemental Controlled Vocabulary](#) (auto-download) for the full list:

Attribute	Definition
Adult	Indicates that the channel is carrying "Adult only" genre programming.
Analog	Indicates that the channel's signal is an analog transmission. This only allows for the attribute of "SDTV"
Audio	Indicates that the channel is carrying predominantly music audio type programming, fed by satellite.
Digital	Indicates that the channel's signal is a digital transmission. This allows for attributes of "SDTV," "HDTV," and "UHDTV"
HDTV	Indicates that the channel's signal is a "High Definition" transmission. "HDTV" generally encompasses a more specific set of HDTV high-definition video modes such as 720i, 720p, 1080i, 1080p, etc.
Pay-per-view	Indicates that the channel is pay-per-view.
Premium	Indicates that the channel is usually high-profile, commercial-free and viewers have to pay a premium to receive it.
SDTV	Indicates that the channel's signal is a "Standard Definition" transmission.
Sports	Indicates that the channel's programming content is mainly sports events or sports-related programs.
UHDTV	Indicates that the channel's signal is an "Ultra High Definition" transmission. "HDTV" generally encompasses a more specific set of HDTV high-definition video modes such as 2160p, and consumer terms "4K" and "8K"

## Relationships

Relationship types indicate the given channel's relationship to other channels.



XPATH Element\Attribute	Description	Example
relationships/relationship/	A second programming service to which this one is related.	11705
relationships/relationship/@type	A description of the nature of the relationship between two programming services.	Digital Version of

Below are some common relationship types, see [Supplemental Controlled Vocabulary](#) (auto-download) for the full list:

Type	Definition
Digital Sibling of	Indicates the multicast channels airing additional programming on a digital channel's tower/equipment.
Digital Version of	Indicates that a channel is digitally compressing the signal of an analog station to simulcast or multicast additional programming from the analog station's tower/equipment. This attribute is primarily designated for DT stations as a Digital Version of its Analog counterpart (i.e WTENDT is the Digital Version of WTEN).
HD Version of	Indicates a channel that airs same programming as SD channel, but in HD.
SD Version of	Indicates a channel that airs same programming as HD channel, but in SD.
UHD Version of	Indicates a channel that airs same programming as another channel, but in Ultra HD (4K).
Streaming Version of	A channel that is a feed offered by a traditional linear source, made available over the internet. Programming on a streaming channel does NOT need to be identical to linear feed.
Time Zone Sibling of	Indicates a channel that is an exact duplication of another (parent) channel, but broadcasts in a different time zone.
Can Use Branded Images From	Indicates programming services that have permission to utilize branded images from another programming service. Ex. PBS affiliate can use branded images from PBS

### Transport Identifiers

Transport identifiers are transmitted in the broadcast signal of the channel and can be used to map broadcast channels to channels in EPG data. Depending on the country, different broadcast standards are in use - for example ATSC in North America, DVB in EU and ANZ, ISDB in most of LatAm and Japan. Gracenote currently supports ATSC TSID in the US at the source level.

XPATH Element\Attribute	Description	Example
transportIds/transportId/	Source transport identifier	2159
transportIds/transportId/@system	Source transport identifier system	ATSC
transportIds/transportId/@type	Source transport identifier type	TSID

## Imagery

Source logos are collected for the most carried stations in each country and major provider. Logos are not available for every source. Gracenote typically does not collect logos for individual broadcast affiliates, but instead references the parent network logo.

XPATH Element/Attribute	Description	Example
assets/asset/@assetId	Gracenote image identifier	s28719_lw_h15_ac
assets/asset/@type	MIME content type	image/png
assets/asset/@lastModified	Timestamp of last asset/metadata modification	2019-09-21T19:20:11Z
assets/asset/@width	Maximum image width	3840
assets/asset/@height	Maximum image height	2160
assets/asset/@primary	Whether image is primary in the category	true
assets/asset/@category	Image category	Source Logo - dark
assets/asset/@ratio	Image aspect ratio	16:9
assets/asset/URI/	Relative Image URI	assets/s28719_lw_h15_ac.png

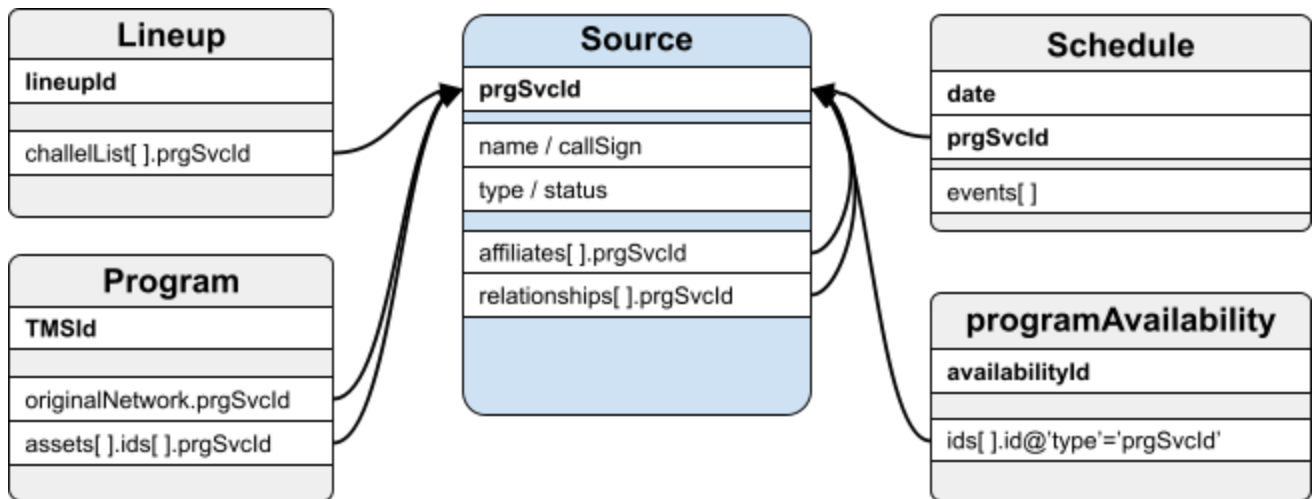
The image asset structure and general handling logic is common to images of all entities, however, categories and aspect ratios vary depending on the entity. The following table provides the source logo categories and aspect ratios.

Category	Description	Ratios
<a href="#">Source Logo - dark</a>	Logo that works on a guide/page with a dark background.	4:3, 16:9
<a href="#">Source Logo - gray</a>	De-saturated version of the logo - also called monochromatic	4:3, 16:9
<a href="#">Source Logo - light</a>	Logo that works on a guide/page with a light background.	4:3, 16:9
<a href="#">Source Logo - white</a>	All-white version of the channel logo - also called knockout version.	4:3, 16:9
<a href="#">Parent Source Logo - dark</a>	Logo of the parent network associated with the affiliate station.	4:3, 16:9
<a href="#">Parent Source Logo - gray</a>	Logo of the parent network associated with the affiliate station.	4:3, 16:9
<a href="#">Parent Source Logo - light</a>	Logo of the parent network associated with the affiliate station.	4:3, 16:9
<a href="#">Parent Source Logo - white</a>	Logo of the parent network associated with the affiliate station.	4:3, 16:9

For more information, see the supplementary document [On API Image Category & Tier Definitions](#) (auto-download).

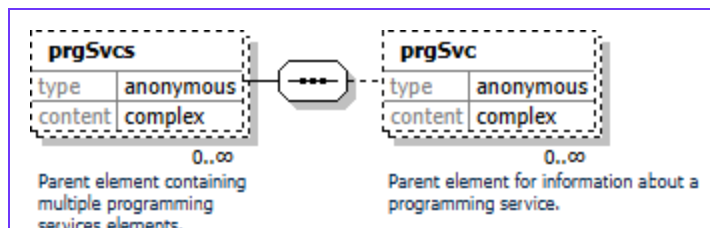
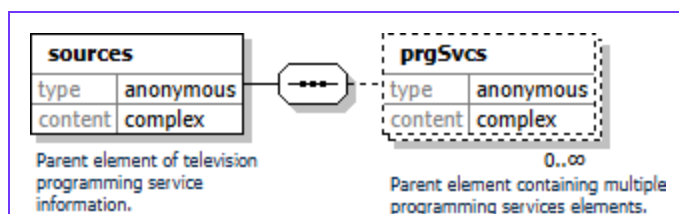
### Entity Relationship Diagram

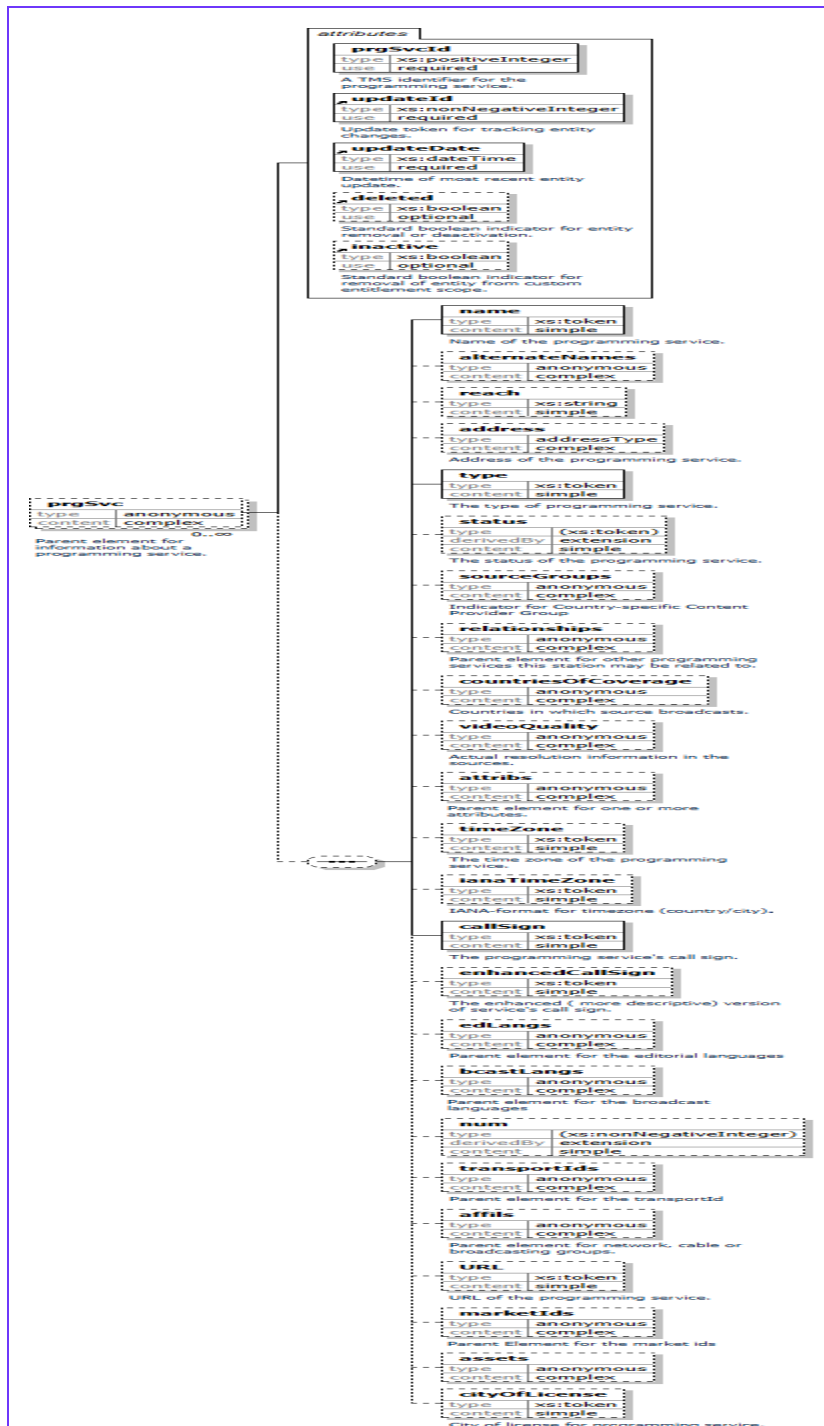
The following ERD illustrates the ID relationships from a Source record.

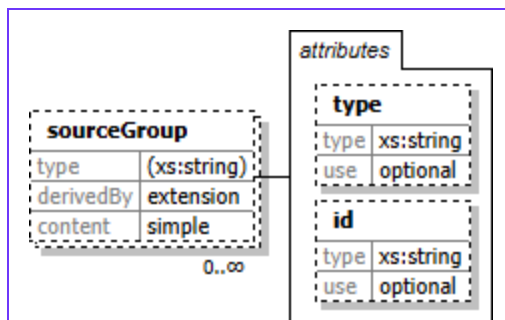
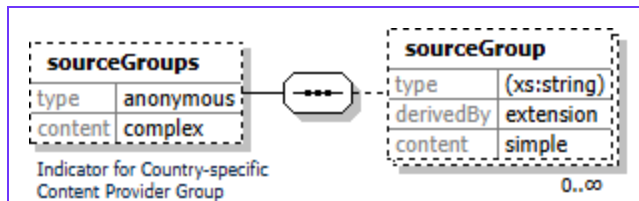


- The “prgSvcId” uniquely identifies each source record
  - on\sources\prgSvc\prgSvc\@prgSvcId
- Sources within channel lineups relate to this element:
  - on\lineups\lineup\channelList\channel\@prgSvcId
- Sources within schedules relate to this element:
  - on\schedules\schedule\@prgSvcId
- Sources within programs relate to these elements:
  - on\programs\program\originalNetwork\@prgSvcId
  - on\programs\program\seasons\season\originalNetwork\@prgSvcId
  - on\programs\program\releases\release\prgSvcId\

## Sources Schema Diagrams







## *Schedules Endpoint*

The Schedules endpoint is designed to retrieve Gracenote TV schedules, organized by station identifier (programming service ID, or prgSvcId) and UTC datetime.

The Schedules schema provides timeslot-level information, including:

- prgSvcId, for linking to station details in Sources API
- TMSId, for language-specific representation of program on schedule
- Datetime, specified in UTC for simple conversion to display timezones
- Schedule ratings, from ratings boards in airing area, if available
- Content rights, to support client specific use cases such as Instant Restart, User Recordings, Mobile Viewing
- Additional timeslot qualifiers, such as CC, HDTV, Live

All schedule days are marked with a unique updateId, denoting current information for station's schedule on that date. Changes to any timeslot within the 24-hour schedule day will result in assignment of a new updateId, which allows you to pull deltas since last retrieval of schedule information. Scope of schedules can be requested by subset of stations in particular country, lineup, or custom station list, and a consistent window of schedule day updates is continuously available for request. For example, customers who choose to receive 21-days of schedules for US and Canadian stations will receive a continuous stream of updates, with new schedule days and stations automatically added to the stream of updates.

## Schedules Endpoint Data Structure and Relationships

### Schedules Schema

Review the following XML schema definition (xsd) to learn about the data structure, fields, and types for this endpoint.

To explore the relationships among all endpoints, see the [interactive schema documentation](#).

### XML Schema URL



[http://files.api.gracenote.com/xsd/on\\_update\\_schedules\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_schedules_3.23.xsd)

The following tables list key data elements of the Schedules endpoint. Unless stated otherwise, the XPATH in the tables below is relative to on/schedules/schedule/

### Identifiers

XPATH Element/Attribute	Description	ID Space
@prgSvcId	Gracenote unique identifier for the station/programming service	prgSvcId
@date	Air date in YYYY-MM-DD format, UTC	-

### Timeslot / Event Data

XPATH Element/Attribute	Description	Example
event/@TMSId	Program TMSId for the event	EP000018078171
event/@time	Event start time	18:00
event/@dur	Event duration in ISO-8601 duration format	PT01H30M
event/@rootId	Program rootId for the event	27519489

### Ratings

Parental rating is an optional element of an event. The airing ratings are provided to Gracenote by sources and may or may not be present. Programs may have their own (Gracenote-curated) parental ratings which can be used as a fallback.

XPATH Element/Attribute	Description	Example
event/tv/tvRating/	TV parental rating for the event	TV14
event/tv/tvRating/@body	The ratings body that issued the parental rating guidelines	USA Parental Rating

For programmatic usage, the ratings bodies and warnings are enumerated in the [Data Dictionaries and Controlled Vocabulary \(page 231\)](#) endpoint, under RatingsBody and RatingAdvisory types.

### Qualifiers

Qualifiers are labels that provide additional information about the airing, such as the technical details about the format; whether this is a live airing or if it's shown with a delay; whether it is a premiere or replay; subtitles/dubbing info etc.

XPATH Element/Attribute	Description	Example
event/quals/	A pipe-delimited list of airing qualifiers for this event	New CC Stereo HDTV Live HD 720p
event/tv/subtitled/, @lang	Availability of subtitles in specified language	true, und
event/tv/dubbed/, @lang	Availability of dubbing track in specified language	true, de
event/tv/sap/, @lang	Availability of secondary audio in specified language	true, es

Notable qualifiers are listed below. Please refer to the [Supplemental Controlled Vocabulary](#) (auto-download) for a full list of qualifiers and their definitions.

Group	Qualifier	Description
Timeshift	Live	Program is being broadcast live, as indicated by the provider (typically applied to sports)
Timeshift	Delay	Identifies the first airing of a sporting event that took place earlier on the same schedule day
Timeshift	Tape	Identifies the first airing of a sporting event that took place on a prior calendar day
Timeshift	Repeat	Identifies the second or later airing of a program, typically applied to sports
Timeshift	Catchup	Program is available after air via on-demand catchup service (VOD or OTT). Primarily used in EU
Timeshift	Cont'd	Program Break: continuation of a program listed in the previous time slot on schedule
Novelty	New	Applied to any show/episode (by provider) the first time it airs per country or channel or language (varies by provider)
Novelty	Premiere	Applied to programs (typically movies) where indicated as such on schedules by the provider
Restrictions	Subject to blackout	A sporting event may be blacked out in certain markets based on specific agreements between networks and sports leagues. Primarily used in North America.
Accessibility	CC	Program is encoded with captioning of dialogue overlaid on the screen for the hearing impaired
Accessibility	DVS	Program is available with an audio descriptive feed to serve the blind or vision impaired
Audio	Stereo	Program is available in some form of stereo sound
Audio	DD 5.1	Program is available in Dolby Digital 5.1 digital sound as provided by schedule provider
Video	HDTV	Programs transmitted in High Definition (720 or greater)
Video	HD 1080i	Programs transmitted in High Definition 1080i
Video	HD 720p	Programs transmitted in High Definition 720p

Group	Qualifier	Description
Video	HD Unknown	Programs transmitted in unspecified High Definition
Video	Letterbox	Programs transmitted in Letterbox/Widescreen format

### Exact Start/End Times and Duration

Exact start/end time and exact duration values are provided to Gracenote by sources and may or may not be present; they are exposed as available for entitled clients. These fields identify when a linear program truly aired and how long it aired for. The values may be different from the published start time and duration of the program.

XPATH Element/Attribute	Description	Example
event/@exactStart	Source-provided exact start time of a scheduled event	01:27:08
event/@exactDur	Source-provided exact duration of a scheduled event	PT01H26M14S
event/@exactSource	The source of the exact time information	Broadcaster
event/@exactStartDateTime	The exact start datetime of a program in UTC	2024-07-20T01:27:08Z
event/@exactEndDateTime	The exact end datetime of a program in UTC	2024-07-20T02:53:22Z

### Broadcast Identifiers

Broadcast ids (also can be referred to as Remote / Source / Provider ids) are identifiers that Gracenote receives from its linear schedule providers. These identifiers are typically used for matching Gracenote data to provider data, they can be of different types (e.g. program, event, series etc), the types vary depending on the provider. Broadcast Identifiers are optional and exposed as available, some are available by entitlement.

XPATH Element/Attribute	Description	Example
event/broadcast/id/	Broadcaster-specific identifier for the event	2679283, 200090296, 422390
event/broadcast/id/@type	Broadcast identifier type	remoteId, remoteSeriesId, remoteEventId

### Referenced CV Lists

The following Schedules value lists are enumerated in the [Data Dictionaries and Controlled Vocabulary \(page 231\)](#) Endpoint:

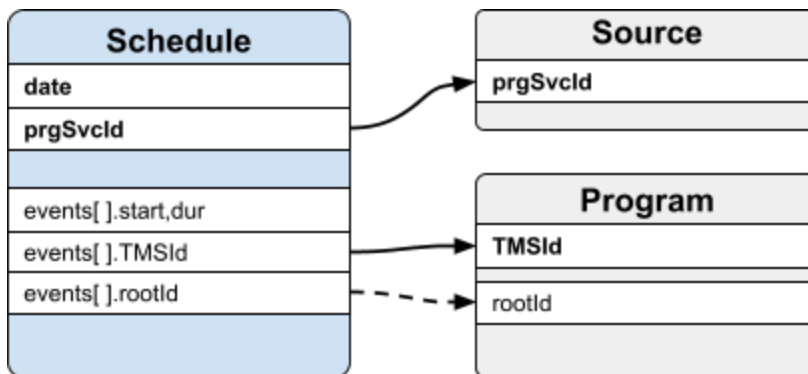
- Ratings

The following Schedules value lists are documented in the [Supplemental Controlled Vocabulary](#) (auto-download):

- Qualifiers

### Entity Relationship Diagram

The following diagram illustrates the references from a schedule record to other objects within the On API.



### API and Example Responses

#### API

```
http://on-api.gracenote.com/v3/Schedules
?updateId=[updateId value]
&limit=[limit value]
&api_key=[your-api-key]
```

## Request Parameters

Parameter	Required?	Description
api_key	Yes	Your API key
updateId	No	Schedules modified at or after updateId.
limit	No	Batch size. Maximum number of schedules (station-days) to be returned, to be used in conjunction with updateId to specify batch size.
prgSvcId	No	For non-batch lookups. Accepts a comma-separated list of programming service IDs (prgSvcId).
startDate	No	For non-batch lookups. Date in yyyy-mm-dd format. Results include station days >= startDate (midnight UTC).
endDate	No	For non-batch lookups. Date in yyyy-mm-dd format. Results include station days < endDate (midnight UTC).



**Important:** Use lookup calls for QA and troubleshooting purposes only. Gracenote does not support lookup APIs for Client production environments.

## Example Requests

Return schedules updated since last delta request, in batches of 1000 station days.

```
http://on-api.gracenote.com/v3/Schedules?updateId=2948902&limit=1000&api_key=<your-api-key>
```

Return full schedules for two stations for specified 10 day window.

```
http://on-api.gracenote.com/v3/Schedules?prgSvcId=10098,10003&startDate=2017-05-01&endDate=2017-05-11&api_key=<your-api-key>
```



**Note:** Only stations and dates within a configured customer stream are returned. For example, customers receiving 21-day schedules for stations in USA/CAN lineups can request any schedule within that range. Any requested stations or dates outside configured range are not included in a response.

### Example Responses

Also see: [Schedules XML examples](#)

### Schedules Updates

You can retrieve schedules using:

- `updateId` - Unique update token, used to retrieve schedules modified since last request, sequenced by `updateId`. Can be combined with `limit` to ingest specified batch size
- `prgSvcId` and date range -Retrieve specific schedule records, sequenced by `prgSvcId` and date. To be used for evaluation and troubleshooting purposes, not programmatic ingestion

When API is used in 'lookup' mode using `prgSvcId` and date range, requests for schedule data outside the pre-configured station list and schedule window will not be retrievable. Only schedules within customer station list and schedule window are returned. To modify pre-configured station list or schedule window, contact your Gracenote representative to modify your configuration.

The most granular update block within schedule data is the station day (`prgSvcId` + date). Schedules are included on day in which event started. For timeslots which cross date boundary (for example, a show which begins at 23:00 and ends at 01:00 next day), the schedule will always appear within station day corresponding to schedule start time.

Automatic extension of stream date range will occur daily at midnight UTC. A full set of additional station days are assigned `updateIds` and become available in update result sets.

Updates are returned in 24-hour blocks. Individual timeslots are not marked with any update indicator. Entire daily station schedule in user datastore should be overlaid with newly updated data.

#### *Automatic Updates to Station List and Schedule Window*

The pre-configured station list is automatically updated to include new stations when they are either added to, or become eligible for, the custom update stream. Existing stations may become eligible for custom update stream if they newly meet filter criteria defined on customer requirements (for example, new station appears on lineup).

Schedules for the newly added/eligible stations are automatically seeded (assigned new consecutive updateIds) and received as normal updates within Schedule Update processing. When stations are removed or fall out of pre-configured station criteria, Schedules API will not include 'deleted' indicator, but will no longer issue updates for the station, and the removed stations will not be returned in lookups.

Similarly, the pre-configured schedule window (for example, 7-days, 14-days, etc) will also be automatically handled with new updateIds assigned to schedules (station days) as they cross into the eligible schedule window.



**Note:** Updates to schedules within pre-configured date range is included. For example, on a 7-day schedule stream, with 1-day buffer on each end, API calls on 5/10/2025 will return updated schedules from 5/9/2025 through (and including) 5/17/2025. Any updates made to schedule dates prior to 5/9/2025 are excluded.

### Schedules Feature Details

This section provides additional information about specific Schedules features, including response types and sample output.



## Exact Start and Duration

Exact start time and exact duration values are exposed as available for entitled clients.

These fields identify when a linear program truly aired and how long it aired. The values may be different from the published start time and duration of the program.

The exact source attribute can have two different values:

- **Broadcaster:** These are the exact start and duration values provided by the source (broadcaster) to Gracenote.
- **Media Distillery:** These are the exact start and duration values provided by an EPG correction service. This is an additional service available from Gracenote.

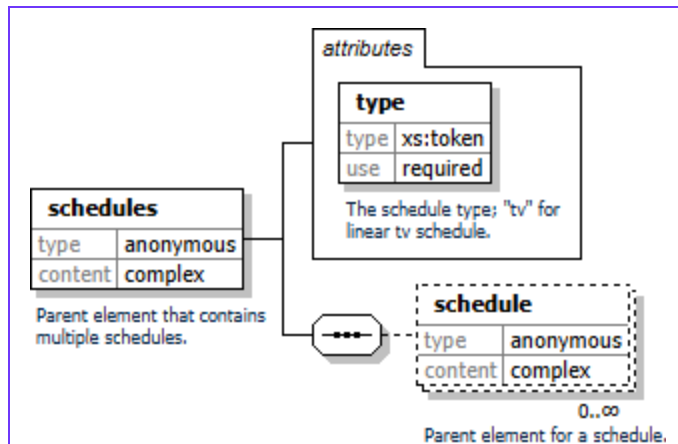
If you are entitled to Media Distillery data, Media Distillery data overwrites Broadcaster provided data if both are available on a channel.

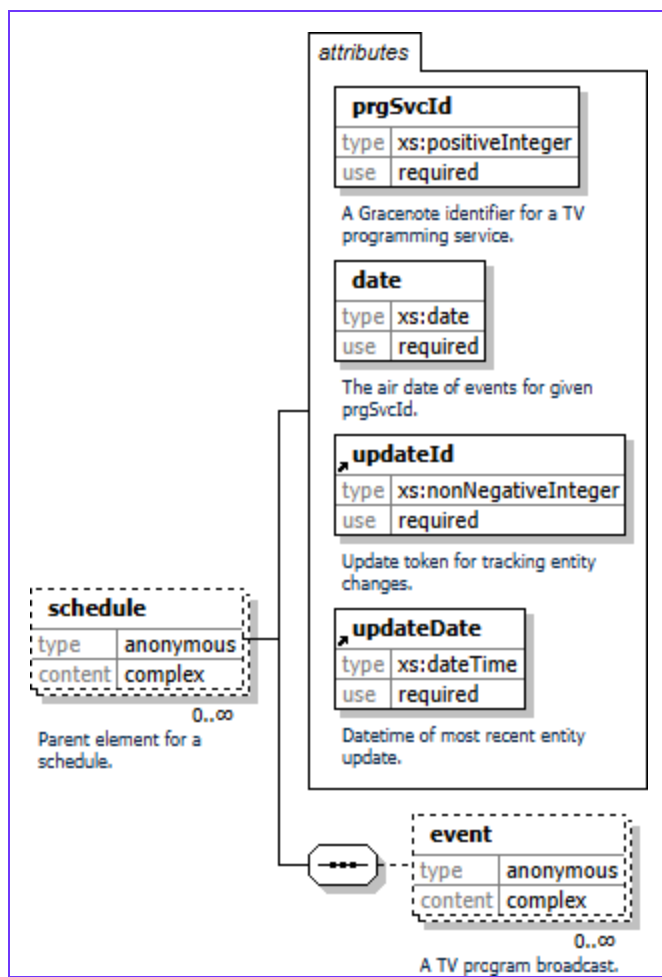
The sample data below has both Broadcaster and Media Distillery data.

## Content Rights

Content Rights (or Usage Rights), Content Flags, Content Restrictions, Usage Restrictions or sometimes Blackouts - represent a piece of metadata attached to linear TV schedule events related to the content availability for different use cases on the target distribution platform. The Content Rights are usually specific to one distribution platform, whether it be an MVPD's service or a D2C streaming service, and describe what broadcasters or content owners allow the platform to do with events appearing in the linear TV programming.

## Schedules Schema Diagrams





## *Programs Endpoint*

The Programs endpoint is designed to provide Gracenote TV and movie program information, organized by industry-standard TMSId for language-specific representation of programs.

The Programs schema provides rich metadata for both movies and TV programs, including:

- TMSId, for language-specific representation of program and use with Schedules API
- Titles and descriptions
- Full cast and crew, identified by personId for linking with celeb details in Celebrity API
- Award nominations and wins
- International ratings
- Release information by country
- Season information, including dates and images
- Image references for use with Media Cloud
- Video Descriptors for more detailed information about

All programs are marked with a unique updateId, denoting current dataset for program. Changes to program data will result in assignment of a new updateId, which allows you to pull deltas since last retrieval, instead of ingestion for full program dataset for refresh. Scope of programs can be requested by schedule relevancy, language, or combination of criteria, dependent on customer need.

## **Programs**

This section provides information about the On API Program identifiers, hierarchy, types, as well as general properties (genres, ratings, releases, relationships) and key fields.

## **Data Structure and Relationships**

The Programs XSD schema file is located here:

[http://files.api.gracenote.com/xsd/on\\_update\\_programs\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_programs_3.23.xsd)

Unless stated otherwise, the XPATH in the tables below is relative to on/programs/program/

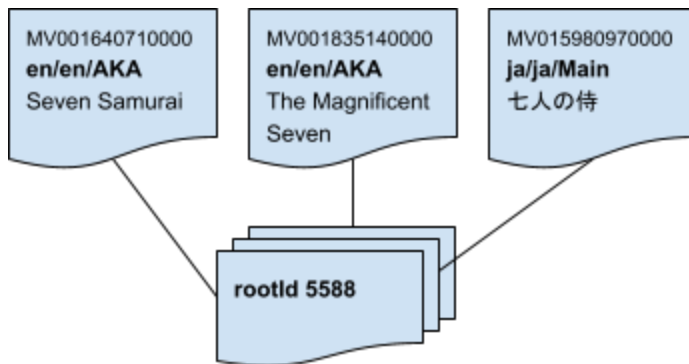
### Identifiers, Language and Title Variants

XPATH Element/Attribute	Description	ID Space
@TMSId	Gracenote unique identifier for the program variant	TMSId
@rootId	Gracenote unique identifier for the program variant group	rootId
@connectorId	TMSId of episode's parent series program	TMSId
@seriesId	RootId of episode's parent series program	rootId
@seasonId	Season "rootId"	rootId
@versionId	Movie versionId	versionId

TMSId is an alphanumeric identifier for the Programs object - a unique metadata variant of a television program.

XPATH Element/Attribute	Description	Example
titles/@lang	Program titles language	en, en-GB, fr-CA, de, es
descriptions/@lang	Program descriptions language	en, en-GB, fr-CA, de, es
titles/title/@subType	Program title subType	Main, AKA, Promotional, IMAX, 3D

The TMSId is used to represent variants of the same program with different title/description languages, or different title variations (title\_lang / desc\_lang / title\_subType):



The rootId is a numeric identifier that connects all metadata/title variants (TMSIds) of the same program (movie, episode, series, special or sports event) - further also referred to as “work”. Occasionally, a program can have variations that exist under different rootIds, in which case the respective sets of programs are typically connected via the program relationship link (see [Program Relationships \(page 117\)](#) section for details).

Movie programs have an additional identifier (versionId) distinguishing different movie versions (such as theatrical version vs director’s cut) under the same rootId. The versionId is not an index in a controlled vocabulary indicating the version type, but rather an identifier similar to the rootId that distinguishes work variants at a more granular (version) level. The versions can differ from one another in any of the following: runtime, rating, color; separate versions are also created for IMAX and/or 3D titles.

Examples of movies with identifiers and language/subType values:

TMSId	rootId	versionId	title lang	desc lang	title subType	title
MV000118140000	<b>6252</b>	6639	en	en	Main	2001: A Space Odyssey
MV000310470000	<b>6252</b>	6639	fr-CA	fr-CA	AKA	2001, l'odyssée de l'espace

TMSId	rootId	versionId	title lang	desc lang	title subType	title
MV000691150000	<b>6252</b>	6639	en	es	Main	2001: A Space Odyssey
MV000691160000	<b>6252</b>	6639	es	es	AKA	2001: Odisea del espacio
MV002514040000	<b>6252</b>	6639	pt-BR	pt-BR	AKA	2001: Uma Odisseia no Espaço
MV011825150000	<b>6252</b>	11361997	en	en	IMAX	2001: A Space Odyssey -- The IMAX 2D Experience
MV001640710000	<b>5588</b>	5945	en	en	AKA	Seven Samurai
MV001835140000	<b>5588</b>	5945	en	en	AKA	The Magnificent Seven
MV015980970000	<b>5588</b>	5945	ja	ja	Main	七人の侍
MV000070860000	<b>4190</b>	4474	en	en	Main	Blade Runner
MV008498820000	<b>4190</b>	4473	en	en	Promotional	Blade Runner: Director's Cut
MV002070550000	<b>4190</b>	173339	en	en	Promotional	Blade Runner: The Final Cut

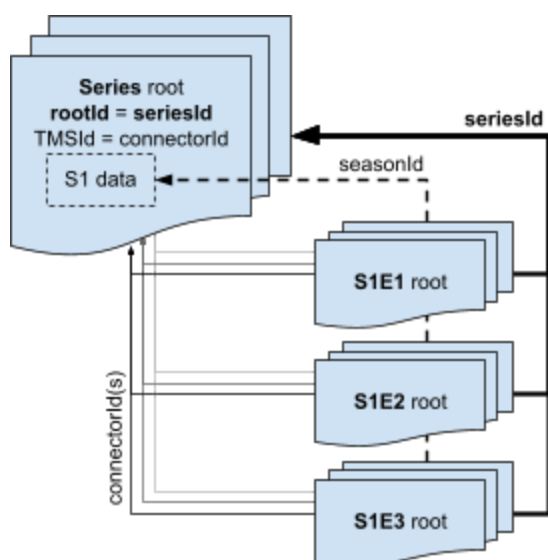
Generally speaking, given multiple programs' TMSIds or versionIds for the same root, Gracenote does not prescribe what the representative or “canonical” variant should be, because it usually depends on the specific use case. For some use

cases such as universal search or aggregated catalog views, it may become necessary to represent each work with a single program.

### Series Hierarchy

Episode programs are linked to parent Series programs using connectorId as well as seriesId and seasonId. Episodes can be episodes of a series, or sporting events that are part of a specific league or competition represented by the Series program.

While seriesId links any/all Episodes in the series to the Series root, the connectorId connects the Episode TMSIds/programs with specific title language / description language / title subtype combination to the corresponding Series TMSId/program (connector). These collections will be further referred to as Series (language) variants - they generally differ in metadata language but there can also be title variations within the same language.



The table below lists sample Series and Episode programs for the en/en/Main variant of “Friends”. Other variants will have the same root, series and season identifiers, but the TMSIds and connectorIds will be different.



TMSId	rootId	connectorId	seriesId	seasonId	S#E#	title or episode title
SH001151270000	183931	SH001151270000	183931			Friends
EP001151270001	1712253	SH001151270000	183931	7892576	S1E1	Pilot
EP001151270004	1712255	SH001151270000	183931	7892576	S1E2	The One With the Sonogram at the End
EP001151270002	1712254	SH001151270000	183931	7892576	S1E3	The One With the Thumb
EP001151270027	1712277	SH001151270000	183931	7892599	S2E1	The One With Ross' New Girlfriend
EP001151270028	1712278	SH001151270000	183931	7892599	S2E2	The One With the Breast Milk
EP001151270029	1712279	SH001151270000	183931	7892599	S2E3	The One Where Heckles Dies

Seasons are not represented by separate program objects (with the partial exception of superseries, see below); instead, the season information is contained within the Series program object (connector) and labeled with the seasonId which is also referenced by the Episode programs belonging to the Season. Episodes may or may not reference/belong to a Season. The seasonId for a given season

(say, S1) is the same for all Series programs with a given root - it is like rootId in that it's not differentiated by the metadata language - however, each Series language variant program will carry (partial) season data that is specific to that variant.

The Series structure in the specific variant (title language / description language / title subtype combination) may or may not be complete. Conversely, there are cases when Series variants contain duplicate sets of Episodes and disambiguation/filtering may be required to derive consistent and unique episode sequences.

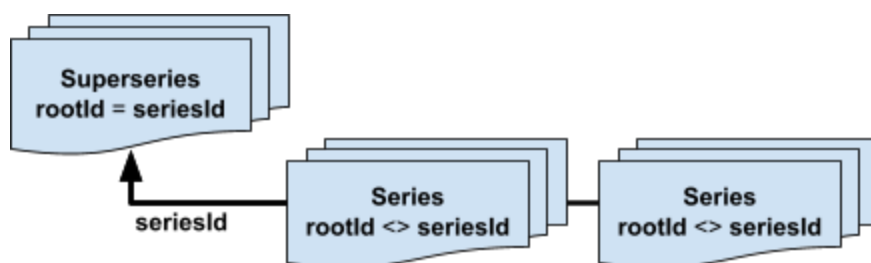
Sports programs follow the same approach for the event-series hierarchy, with the exception of the season aspect - the sports season information is stored elsewhere and the seasonId is not used. Also, Sports and Series program typing is different (see Program Types sections below).

TMSId	rootId	connectorId	seriesId	seasonId	title or episode title
<b>SH049241660000</b>	<b>191273</b>	<b>SH049241660000</b>	<b>191273</b>		MLB Baseball
EP049241660034	26141996	<b>SH049241660000</b>	<b>191273</b>		Boston Red Sox at Atlanta Braves
EP049241660128	26142559	<b>SH049241660000</b>	<b>191273</b>		St. Louis Cardinals at Houston Astros
EP049241660129	26142560	<b>SH049241660000</b>	<b>191273</b>		Pittsburgh Pirates at Detroit Tigers
EP049241660182	26142815	<b>SH049241660000</b>	<b>191273</b>		Milwaukee Brewers at Cincinnati Reds

## Superseries

Series can be further grouped into “superseries” whereas the seriesId of the Episodes and of their immediate Series parent will point to the rootId of the Superseries. Superseries may also have its own Episodes. There should be only one grouping level in the Superseries.

Superseries arrangement is often used in sports programs to break out the final competition Series from the main / regular season game Series. It is also used in cases when the Series contains Seasons whose title is different from the main / original Series title. The “sub-series” programs in this arrangement may contain one or multiple Seasons of the Superseries.



TMSId	rootId	connectorId	seriesId	S##	title or episode title
SH000031280000	191277	SH000031280000	191277		NFL Football
EP000031284393	26058022	SH000031280000	191277		Houston Texans at Baltimore Ravens
SH049253000000	26058095	SH049253000000	191277		2024 Super Bowl
EP049253000001	26058116	SH049253000000	191277		San Francisco 49ers vs. Kansas City Chiefs
SH014661780000	8807210	SH014661780000	8807210	1	American Horror Story
SH016052660000	9423797	SH016052660000	8807210	2	American Horror Story: Asylum
SH017774000000	10127873	SH017774000000	8807210	3	American Horror Story: Coven

TMSId	rootId	connectorId	seriesId	S##	title or episode title
SH015997530000	9400970	SH015997530000	9400970	1,3,4	Dragons: Riders of Berk
SH017764160000	10124235	SH017764160000	9400970	2	Dragons: Defenders of Berk

### Program Types

The Gracenote program typing provides categorical classification of the program - theatrical films can be differentiated from TV movies or short films, series from episodes or short extras, current season sports series/events - from legacy sports series/events. The subType is the main element that identifies the type of the program while the progType provides additional context for Episodes as well as Sports related programs.

XPATH Element/Attribute	Description	Example
progType/	Gracenote Program Type	Feature Film, Series, Sports event
subType/	Gracenote Program subType	Feature Film, Series, Episode, Team Event

Some of the notable progType / subType combinations are listed in the table below.

progType	subType	Description	Example
Feature Film	Feature Film	A full length movie (40+ min)	2001: A Space Odyssey
TV Movie	TV Movie	A movie made for TV	High School Musical

progType	subType	Description	Example
Short Film	Short Film	A short movie under 40 min	When Billie Met Lisa
Series	Series	Programs produced as a related group and airing regularly	Game of Thrones
Series	Episode	Episode of a Series	The One Where Ross and Rachel Take a Break
Series	Preview	Extras/Preview/Bonus content	Broadway: Extras
Special	Special	A program produced as one asset; one-time-only program - though it can re-air	Inside California Education
Miniseries	Miniseries	TV Series with storyline resolving within a predefined set of episodes	Chernobyl
Miniseries	Episode	Episode of a Miniseries	Part 1
Sports event	Team Event	Team event of the current season (as of airing time)	Kansas City Chiefs at Buffalo Bills
Sports event	Sport Event	Non-team event of the current season (as of airing time)	WM Phoenix Open, Second Round
Sports event	Sport	Sport series for current season (as of airing time) or spanning multiple seasons	NBA Basketball
Sports event	Series	Legacy/classic sports game series	Classic All-Star Wrestling
Sports event	Episode	Legacy/classic sports game	Great Games: San Diego Padres vs. Colorado Rockies
Sports non-event	Series	Sports-related repeating program	NCAA Tournament Postgame
Sports non-event	Episode	Sports-related episode of a series	This Week in Baseball: September 27, 1989

progType	subType	Description	Example
Sports non-event	Special	Sports-related non-repeating program	Hitchins vs. Lemos: Weigh-In
Paid Programming	Paid Program	Programs produced to sell a product	KitchenAid Mixer
TBA	TBA	No programming or programming info available	To Be Announced
Off Air	Off Air	Station/channel Off Air / no programming available	SIGN OFF

The [Supplemental Controlled Vocabulary](#) (auto-download) provides a detailed list with more comprehensive definitions and examples.

## Titles

Each program provides one or more titles of different types (and languages for the original title type).

XPATH Element/Attribute	Description	Example
titles/title/	Program title	The Sopranos
titles/title/@lang	Program title language	en, en-GB, es, de, fr-CA
titles/title/@type	"full" should be used for most display purposes.	full, original, red, sort, uncensored

In episodes and sports event programs, these fields carry the Series variant title; they are generally referred to as show titles or program titles. The episode or sports event titles in turn are carried by the [Episode-specific Elements \(page 115\)](#) (see corresponding section below), and are referred to as the episode titles.

## Descriptions

XPATH Element/Attribute	Description	Example
descriptions/desc/	Program description	A square yellow sponge lives in the underwater city of Bikini Bottom.
descriptions/desc/@lang	Program description language	en
descriptions/desc/@type	Program description type	plot, generic, summary, source

## Cast

XPATH Element/Attribute	Description	Example
cast/member/@ord	Cast billing/listing order	01
cast/member/@personId	Gracenote unique identifier for the cast member	1366
cast/member/name/@nameId	Gracenote unique identifier for a cast member's credited name	1366
cast/member/characterName/	Name of the character portrayed by the cast member	Tyler Durden
cast/member/role/@roleId	Gracenote cast role identifier	1

## Crew

XPATH Element/Attribute	Description	Example
crew/member/@ord	Cast billing/listing order	02
crew/member/@personId	Gracenote unique identifier for the crew member	470664
crew/member/name/@nameId	Gracenote unique identifier for a crew	479539



XPATH Element/Attribute	Description	Example
	member's credited name	
crew/member/role/@roleId	Gracenote crew role identifier	626

## Genres

Genre is an optional but well-populated element of a program. Multiple genres can be assigned to programs, generally from more general to more specific. The number of genres can be unlimited and some programs have over a dozen, but the median number of genres is two. Multiple genre assignments do not have weight or relative importance.

Certain genres indicate concepts such as target audience (Children, Adults Only), animation (Animated, Anime), or whether the program is holiday-related (Holiday). There are subsets of genres that are only applied to Movies, scripted programs or Sports programming.

For the full list of genres with definitions, refer to the [Supplemental Controlled Vocabulary](#) (auto-download). For programmatic usage, the genres are enumerated in the Controlled Vocabulary endpoint under Genre type.

XPATH Element/Attribute	Description	Example
genres/genre/	Gracenote genre value associated with the program	Thriller, Drama
genres/genre/@genreId	Gracenote unique identifier for the genre	19, 9

## Ratings

Parental rating is an optional element of a program. Regardless of the program language, the program will typically contain parental ratings from multiple rating bodies of various countries.

The program parental ratings are typically used as a fallback in cases when the parental rating information is missing in the linear schedule or streaming catalog data.

The parental rating data is suitable for display purposes only, and not to be used to drive business logic.

XPATH Element/Attribute	Description	Example
ratings/rating/@code	Rating assigned to program	R
ratings/rating/@ratingBodyId	Id of the ratings body that issued the rating code	1
ratings/rating/@ratingsBody	Organization providing the rating	Motion Picture Association
ratings/rating/warning/	Rating body specific advisory	Violence and Language

For programmatic usage, the ratings bodies and warnings are enumerated in the Controlled Vocabulary endpoint, under RatingsBody and RatingAdvisory types. Programs may also carry legacy warnings under ratings/advisories elements. These should not be used as they are not associated with a rating body.

## Releases

Release information is an optional element of a program. Release dates are typically provided in the country timezone, not GMT. When available, release dates can be used as original air dates in the specific market.

XPATH Element/Attribute	Description	Example
releases/release/country/	Country code for the country of the release	USA, DEU
releases/release/type/	Gracenote release type for theatrical, broadcast, home video	Premiere, Wide, Limited
releases/release/date/	Date of the release for the country and	2009-11-17

XPATH Element/Attribute	Description	Example
	type	
releases/release/medium/	Release medium	TV, DVD, Theatre, VOD
releases/release/prgSvcId/	Gracenote unique identifier for source/content provider of release	47119

## Seasons

For Series with Seasons, this section will contain the list of seasons identifying each season by the seasonId and providing additional season-specific information such as premier/finale dates, cast/crew (in the same format as program cast/crew) as well as imagery (in the same format as program imagery), as available.

XPATH Element/Attribute	Description	Example
seasons/season/@seasonId	Identifier for the season of this series program	194842
seasons/season/@seasonNumber	The season number of the series	1
seasons/season/@seasonYear	The season year if no season number is available	2007
seasons/season/seasonPremiere/	The season premiere original air date	2008-01-20
seasons/season/seasonFinale/	The season finale original air date	2008-03-09
seasons/season/totalSeasonEpisodes/	Total number of episodes in the season	7
seasons/season/cast/...	The season cast, same format as program cast	
seasons/season/crew/...	The season crew, same format as program crew	
seasons/season/assets/asset/...	The season images	

### Video Descriptors

Video Descriptor assignments are an optional element of a program. Descriptors are assigned at the Program root level, i.e. different TMSIds on the same rootId should have the same descriptors. In Series, descriptors are typically assigned to the Series program. The order of descriptor assignments to the program is arbitrary and does not imply importance.

XPATH Element/Attribute	Description	Example
videoDescriptors/videoDescriptor/@id	Gracenote unique id for the Video Descriptor	GN5ME6XVY48S4HS
videoDescriptors/videoDescriptor/@weight	Video Descriptor weight	9

### Other Notable Elements

The following miscellaneous elements can be used in business logic for mapping, filtering, disambiguation, and other purposes.

XPATH Element/Attribute	Description	Example
origAirDate/	Original air date (non-Movies)	1994-09-22
audioOriginalLang	Original audio languages of the program	en
originalNetwork/@prgSvcId	Network on which the series premiere aired	NBC
runTime/	Program duration in ISO-8601 format: PT01H30M (Movies)	PT02H19M
duration/	Program duration in minutes (non-Movies)	30
colorCode/	Program color or B/W info	color
partNumber/	Multipart program part number	1
totalParts/	Multipart program total parts	2

### Movie-specific Elements

XPATH Element/Attribute	Description	Example
versionLabel/	Unstructured free text field providing additional context for the movie version	Unrated, Director's Cut, 70mm
movieInfo/	Sound mix format used by the	Mono, Stereo,

XPATH Element/Attribute	Description	Example
soundMixes/soundMix	movie	Magnetic Stereo 6 Track
movieInfo/ pictureFormats/pictureFormat	Picture format used by the movie	70mm
movieInfo/ productionCompanies/name	Production company for the movie	Stanley Kubrick Productions
movieInfo/yearOfRelease	Movie year of the release	1968
movieInfo/officialURL	Movie's official studio URL	

### *Episode-specific Elements*

The episode title language and subtype usually - but not always - follow the program title language and subtype. For example the market variant of a Series might have an English show title but episode titles in the market language.

XPATH Element/Attribute	Description	Example
episodeInfo/title/	Episode title	Winter Is Coming
episodeInfo/title/@subType	Episode title subType	Main
episodeInfo/title/@lang	Episode title language	en
episodeInfo/@number	Episode number	1
episodeInfo/@numInSeries	Episode sequence number, across all seasons	1
episodeInfo/@season	Episode season number	1
episodeInfo/@seasonYear	Episode season year	2024

### *Sports-specific Elements*

### On Sports Info

XPATH Element/Attribute	Description	Example
sportsInfo/gameDate/	Scheduled date of the live coverage of the sports event	2024-01-20
sportsInfo/gameTime/	Scheduled local time of the live coverage of the sports event	17:00:00-08:00
sportsInfo/gameTimeZone/	Time zone of the of the sporting event location	Pacific Observing
sportsInfo/season/	Single year, or start and end years of the sport's season	2024
sportsInfo/season/@type	Type of sports season, pre-, regular, post-	Post
sportsInfo/venue/	The official name of the venue	Levi's Stadium
sportsInfo/venue/@venueBrandId	Gracernote unique identifier for the venue name	1908
sportsInfo/team/	The official name of the sports team	San Francisco 49ers
sportsInfo/team/@teamBrandId	Gracernote unique identifier for the team name	57
sportsInfo/team/@isHome	Boolean designating team as 'home' team in the event	true

### On Sports Data (GSC)

In the table below, the XPATH for is relative to  
on/programs/program/sportsData/sportsEvents/SportsEvent

XPATH Element/Attribute	Description	Example
id/	Gracernote Sports Connected event identifier	GNAK4TXGHDSJNQV
type/	Gracernote Sports Connected event	MATCH

XPATH Element/Attribute	Description	Example
	type	

## Program Relationships

Program relationships associate programs to celebrities, sports organizations or other programs.

Relationships to other programs can be broadly classified as same-program (Custom Version, Alternate Audio, ...), or different-program (Derivative, Remake, Crossover, ...). The same-program relationships are useful for disambiguating among multiple rootIds and arriving at the “representative” rootId for the program. The different-program relationships are useful for recommendations / related content use cases. Most relationships are directional; the direction is specified in the association value. Please refer to the [Supplemental Controlled Vocabulary](#) (auto-download) for individual relationship definitions and examples.

XPATH Element/Attribute	Description	Example
relationships/relationship/type/	Relationship type	Franchise
relationships/relationship/association/	parent, child, peer	peer
relationships/relationship/rootId/	Program target	209921
relationships/relationship/label/	Relationship label	Battlestar Galactica
relationships/relationship/organizationId/	Organization id target	20
relationships/relationship/personId/	Celebrity id target	100
relationships/relationship/personNameId/	Celebrity name id target	100

## Imagery

In the table below, the XPATH for program images is relative to on/programs/program/ and the XPATH for season images is relative to



on/programs/program/seasons/season/

XPATH Element/Attribute	Description	Example
assets/asset/@assetId	Gracenote image identifier	p173378_p_v10_aa
assets/asset/@type	MIME content type	image/jpeg
assets/asset/@lastModified	Timestamp of last asset/metadata modification	2016-05-11T06:21:00Z
assets/asset/@width	Maximum image width	1536
assets/asset/@height	Maximum image height	2048
assets/asset/@primary	Whether image is primary in the category	true
assets/asset/@category	Image category	Poster Art
assets/asset/@ratio	Image aspect ratio. Default program aspect ratios are: 2:3, 3:4, 1:1, 4:3, 16:9, 2:1	3:4
assets/asset/@tier	Image tier, usually the subType of the program	season
assets/asset/@seasonId	For season images, seasonId	7894511
assets/asset/@provider	For restricted images, image provider	Warner - restricted
assets/asset/URI/	Relative Image URI	assets/p173378_p_v10_aa.jpg

The image asset structure and general handling logic is common to images of all entities, however, categories, tiers and aspect ratios vary depending on the entity. The following tables cover most used program image categories, aspect ratios, tiers as well as their prevalence across different program types. For more information, see the supplementary document [On API Image Category & Tier Definitions](#) (auto-download).

Texted image categories

Category	Tiers	Programs	Description	Ratios	Example
VOD Art	-	Movies	Official art with title graphics	*	<a href="#">12</a>
Banner-L1	Series, Season	Series	Press kit or other image with title graphics	*	<a href="#">12</a>
Banner-L1	Sport, Sport Event	Sport Events	Image representative of sport/league with title	*	<a href="#">12</a>
Banner-L2	Team Event	Sport Events	Represents teams in specific sport/league	*	<a href="#">12</a>
Banner-L2	Series	Series	Gracenote-created stylized title over official or stock image for the program	*	<a href="#">12</a>
Poster Art	-	Movies	Movie poster art	2:3, 3:4	<a href="#">12</a>

### Textless image categories

Category	Tiers	Programs	Description	Ratios	Example
Iconic	-	Movies	Scene stills	*	<a href="#">12</a>
Iconic	Series	Series	Press kit or other image without title graphics	*	<a href="#">12</a>
Iconic	Episode	Series	Episode stills	*	<a href="#">12</a>
Iconic	Sport	Sport Events	Image representative of sport/league without title	*	<a href="#">12</a>
Key Art	-	Movies	Hero + background image	*	<a href="#">12</a>

### Referenced CV Lists

The following program value lists are enumerated in the [Data Dictionaries and Controlled Vocabulary \(page 231\)](#) endpoint:

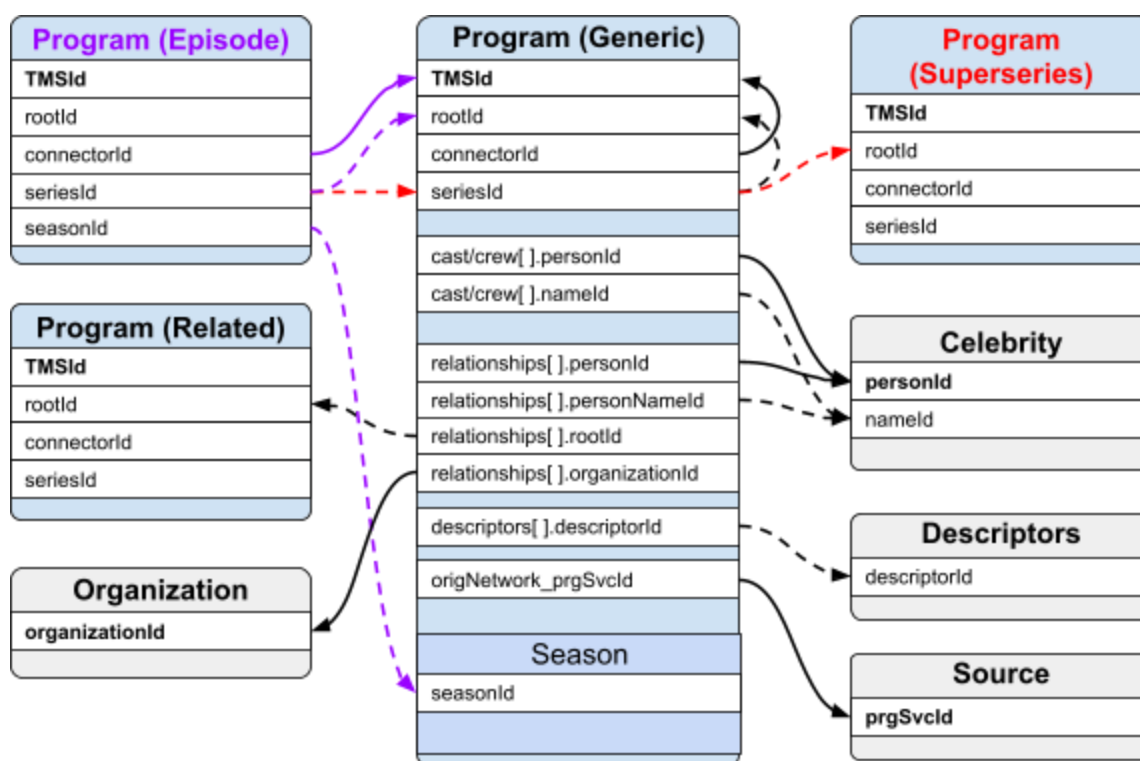
- Genre, Ratings, Awards, Cast/Crew Roles, Countries.

The following program value lists are documented in the [Supplemental Controlled Vocabulary](#) (auto-download):

- Program Types/Subtypes, Title Subtypes, Program Relationships, Release Media. The Supplemental Controlled Vocabulary also includes Gracenote Genre descriptions.

### Entity Relationship Diagram

The following diagram illustrates the references from a program record to itself, other program types as well as other objects within the On API.



- A generic program will have its TMSId=connectorId and rootId=seriesId. The seriesId is not present for movie programs (progType=Feature Film, TV Movie, Short Film).

- The Episode program's connectorId and seriesId will point to the parent Series record TMSId and rootId, respectively. If it exists, the Episode seasonId will point to one of the Seasons contained in the parent Series record.
- The series can be further grouped into "superseries" whereas the seriesId of the Episodes and of their immediate Series parent will point to the rootId of the Superseries.
- The program relationship elements can either point to another (related) program via rootId, or to a Sports Organization (organizationId) or a Celebrity (personId and personNameId).
- A program may point to video descriptor entities
- Other API entities can reference programs but they are not shown on this diagram

TMSId	rootId	connectorId	seriesId	seasonId	title
MV000118140000	6252	MV000118140000	-	-	2001: A Space Odyssey
SH001151270000	183931	SH001151270000	183931	-	Friends
EP001151270002	1712254	SH001151270000	183931	7892576	The One With the Thumb
SH000031280000	191277	SH000031280000	191277	-	NFL Football
SH049253000000	26058095	SH049253000000	191277	-	2024 Super Bowl
EP049253000001	26058116	SH049253000000	191277	-	SF 49ers at KC Chiefs

## API and Example Responses

### API

[http://on-api.gracenote.com/v3/Programs?updateId=\[updateId value\]](http://on-api.gracenote.com/v3/Programs?updateId=[updateId value])

```
&limit=[limit value]
&api_key=[your-api-key]
```

## Request Parameters

Parameter	Required?	Description
api_key	Yes	Your API key
updateId	No	Programs modified at or after updateId.
limit	No	Batch size. Maximum number of programs to be returned. Use with updateId.
tmsId	No	<b>For non-batch lookups.</b> 14-char format tmsID. Accepts comma-separated list of TMSIDs.
rootId	No	<b>For non-batch lookups.</b> Supports a single value only. Does not support a comma-separated list of IDs.



**Important:** Use lookup calls for QA and troubleshooting purposes only. Gracenote does not support lookup APIs for Client production environments.

## Example Requests

Return All TMSIDs for a Program Using Its Root ID. You can use a Program Root ID instead of TMSIDs for Program requests. This returns all of the TMSIDs under that Root ID that you are entitled to.

```
http://on-api.gracenote.com/v3/Programs?rootId=3554929&api_key=xxxx
```

Return Full Program Set in Batches of 1000

```
http://on-api.gracenote.com/v3/Programs?updateId=0&limit=1000&api_key=<your-api-key>
```

Return Program Data for a Set of TMSIDs

```
http://on-api.gracenote.com/v3/Programs?tmsId=EP002777950623,SH002777950000,EP000031281221,EP000031281286,MV000012490000&api_key=<your-api-key>
```

## Return Program Data for a Single TMSId

[http://on-api.gracenote.com/v3/Programs?tmsId=SH002777950000&api\\_key=<your-api-key>](http://on-api.gracenote.com/v3/Programs?tmsId=SH002777950000&api_key=<your-api-key>)

### Example Responses

See [Programs XML examples](#). Also see [On API Example Responses](#)

### Identifying a Deleted Program

When a Program contains "deleted=true", it indicates that this program is no longer valid and can be deleted from your databases: For more information see [Removals \(Object Deletion / Inactivation\) \(page 11\)](#).

### Programs Update Requests

When requesting updates, the most recent version of a program is returned. Updates are not 'replayed' as a log of changes. For example, if a program is added, modified once, and then modified again, the next call for updates includes the program only once in the response, with latest updateId. updateIds in a response are not consecutive, although programs are sorted by updateId.



**Note:** In v3/Programs, updateId applies to a TmsId-specific version, so multiple TMSIds with same rootId (language variations of same program) will each be marked with unique updateIds.

### Programs Feature Details

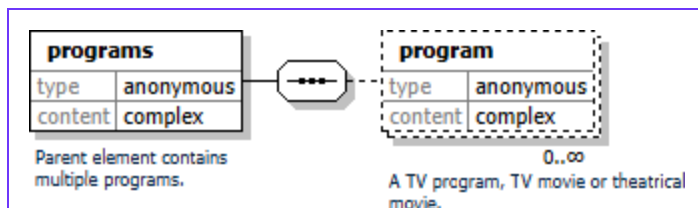
This section provides additional information about specific Programs features, including response types and sample output.

Feature	Description
Program RoleID	Role ID is added to Program cast/crew elements to allow you to lookup language translations for each role in the Controlled Vocabulary. The current role values provided in the cast/crew elements are only English.

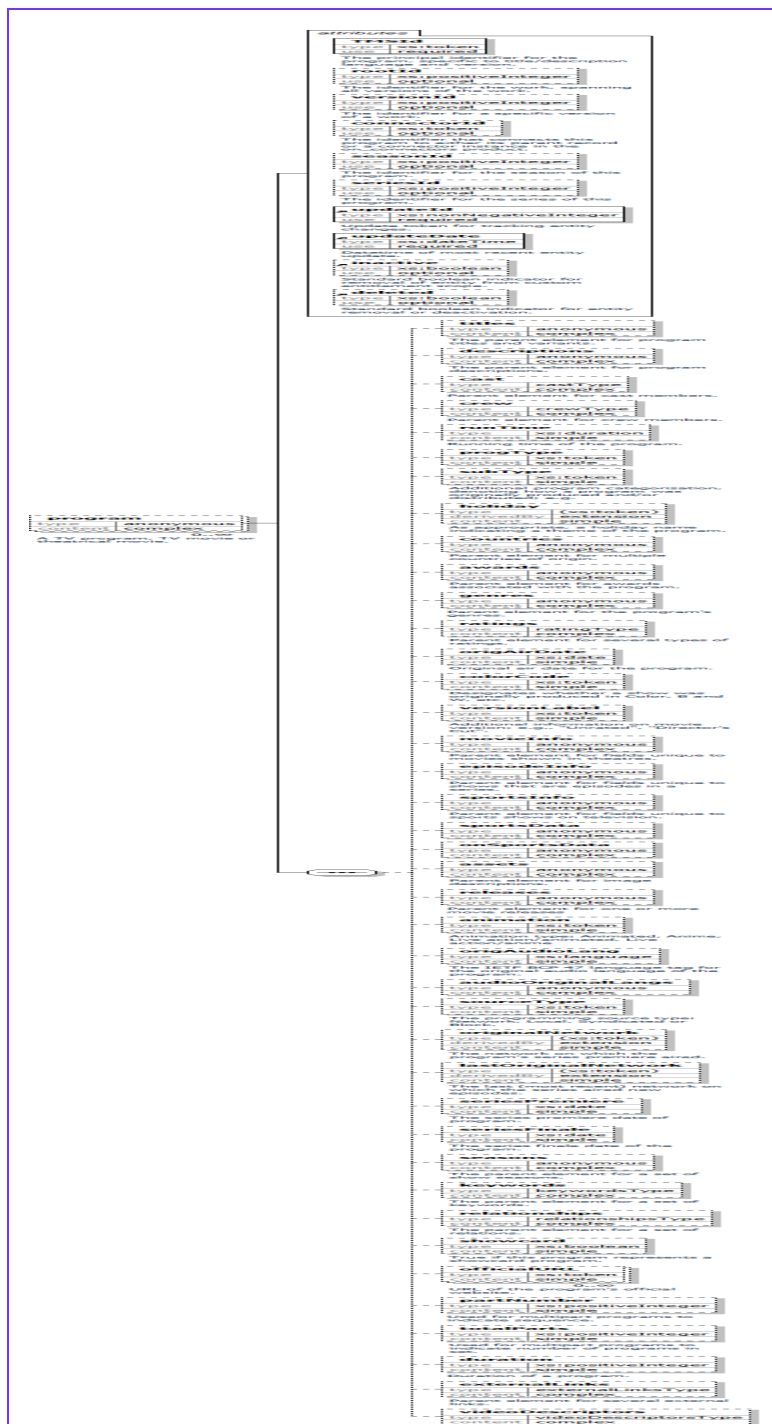
Feature	Description
IMDb Links	To make linking external data easier for customers to support better discovery and navigation, Gracenote will support providing links from TMSIds to IMDb Ids within its programs endpoint output. All TMSIds with the same rootId, will have the same IMDb Id.
Duration	A duration value is added when available - this field is a content duration for a time slot including breaks. Another field already available is runTime, which outputs the actual time measurement of the content, not including breaks.
Image Type	Branded: Some sources provide Gracenote with program imagery containing their network logo. Once licensed these images will also be made available in the assets block within programs.
Image Type	Market: Some sources provide Gracenote with imagery that differs in their market from the imagery Gracenote has collected, usually for the default market or first market that the program was available in or produced for. These images call out the market they are valid for at the programs endpoint.
Image Type	Restricted: Gracenote offers a service to clients where we deliver certain restricted images from content providers. Restricted images are images from a specific source/provider who want them to be delivered only to those customers that have a contractual obligation with the source to use these images. Contact your technical account manager to get information about licensing these images.
Referenced Image Size Change	<a href="http://developer.tmsapi.com/docs/read/media_cloud">http://developer.tmsapi.com/docs/read/media_cloud</a> .
Title Type	Original: The original title type is a way to represent the first title that show/movie was released in. Not all programs will have an original title.
TMSId Replacements for Long-Running TV Series	For certain types of TV series, usually very long running or heavily repackaged shows, there is a limit of 10,000 episodes in the Gracenote database. This is due to the fact that the last 4 digits of the TMSId are reserved for episodic records. For the same series, the limit can be reached earlier for one program language than for another, depending on the number of episodes airing in a given market. Example: "Fireman Sam", Series Root ID: 1732101

Feature	Description
	<ul style="list-style-type: none"> <li>Series TMSId: SH012693990000</li> <li>Episode TMSId: EP012693990007</li> </ul> <p>Before the limit is reached, Gracenote generates a new TMSId for the series in the applicable program language. The root ID remains the same, but the TMSId changes. The new TMSId will be referenced for any newly created episodes. Example:</p> <ul style="list-style-type: none"> <li>New Series TMSId: SH036306920000</li> <li>Episode TMSId: EP036306923692</li> </ul> <p>Gracenote will generally use the original and new TMSIds for creation of episodes in sequential order. For example, earlier seasons would reference the original TMSId, and later seasons the new TMSId. However, it is possible for both original and new TMSIds to be referenced in the same season. This is because it is not always possible to create all episodes for a given season at the same time. With children content, repackaging is very common and it is likely that multiple episodes of an earlier season get packaged together years later. These repackaged episodes would still get created under the original season, but may now be using the new TMSId.</p>

## Programs Schema Diagrams









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## *Celebrities Endpoint*

The Celebrities endpoint retrieves Gracenote information about entertainment personalities, identified by their Gracenote personId. This endpoint provides a default data set, and with an additional entitlement, provides Enhanced Celebrity data.

The default Celebrities endpoint provides general information, including:

- Awards
- Basic biographical information such as birth date and place of birth
- Images (assets), such as celebrity headshots
- Mediography (basic biographical information)
- Person ID for linking to cast and crew in Programs API
- Primary and alternate names
- The Enhanced Celebrity entitlement extends this data significantly. See the [Data Dictionaries \(page 231\)](#).

This entitlement extends the default Celebrities data to include:

- Nationality
- Ethnicity
- Participant Types
- Biographies
- Relationships
- Relationship Events
- Education
- Milestones
- Notes
- Quotes
- Enhanced Awards
- Highlights
- Social Media
- Enhanced Images (baselineAssets)

## Updating Celebrities Data

All celebrities are marked with a unique updateId, denoting current information for the celebrity. Changes to any person data will result in assignment of a new

updateId, which allows you to pull deltas since last retrieval of celebrity information. You can use celebrity information in conjunction with program cast, crew, and awards information to provide a searchable and connected mediography for celebrities.

## Celebrity Requests

The Celebrities endpoint provides information about entertainment personalities, identified by personId attribute.

For an additional subscription, you can enable Enhanced Celebrity for additional information about celebrities including additional images, award information, and others. See Enhanced Celebrity Requests.

## Celebrities

Celebrities is a collection of personal facts for the most popular performers and key production crew members appearing in linear and on demand services. Metadata includes a recent red carpet or publicity photo, a.k.a. and translated names, major industry awards nominations and wins, and a comprehensive mediography of credited roles in television and movie productions. Gracenote IDs are applied to all person, name, award, and credited program references to provide connectivity within the On metadata suite.




Photo courtesy of Newsroom

**James Gandolfini**

**Place of Birth:** Westwood, New Jersey

**Date of Birth:** September 18, 1961

**Date of Death:** June 19, 2013

**Awards**

**Winner** - 2008 - Screen Actors Guild Awards - Outstanding Performance by a Male Actor in a Drama Series - The Sopranos

**Nominated** - 2007 - Emmy (Primetime) - Outstanding Lead Actor in a Drama Series - The Sopranos

[More Awards](#)

**Mediography**

Movies	TV Shows	Made For TV Movies
Enough Said (2013) ***	Enough Said: HBO First Look	Nicky Deuce (2013) (TV)
The Incredible Burt Wonderstone (2013) **	Hurricane Sandy: Coming Together	Hemingway & Gellhorn (2012) (TV)
Zero Dark Thirty (2012) ***1/2	Wartorn 1861-2010	Cinema Verite (2011) (TV)
Not Fade Away (2012) **1/2	A Whole New Day	12 Angry Men (1997) (TV)
Killing Them Softly (2012) ***	The Sopranos	
Violet & Daisy (2011)	Gun	
Down the Shore (2011)	Theater Talk	
Welcome to the Rileys (2010) **		
Where the Wild Things Are (2009) ***		
The Taking of Pelham 123 (2009) **1/2		
In the Loop (2009) ***1/2		
Stories USA (2007)		
All the King's Men (2006) **		
Lonely Hearts (2006) ***		
Romance & Cigarettes (2005) **1/2		
Be Cool (2005) **		

## Celebrities Data Structure and Relationships

### Celebrities Schema

Review the following XML schema definition (xsd) to learn about the data structure, fields, and types for this endpoint.

To explore the relationships among all endpoints, see the [interactive schema documentation](#).

### XML Schema URL

[http://files.api.gracenote.com/xsd/on\\_update\\_celebrities\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_celebrities_3.23.xsd)

### Celebrities Key Fields

The following data dictionary shows the XPATH of key elements and attributes for “core” celebrity content.

The XPATH in the table below is relative to: on/celebrities/person

XPATH Element\Attribute	Description	Example
@personId	Gracenote unique identifier for the celebrity	62982
type	Celebrity type: person, group, animal	Person
profile\gender\	The celebrity's gender, optional	Male
profile\birthName\	The celebrity's full name at birth, optional	Thomas Jeffrey Hanks
profile\birthPlace\	The celebrity's birthplace, optional	Concord, California, USA
profile\birthDate\	The celebrity's birth date, optional	1956-07-09
mediography\	Productions on which this celebrity worked in some credited role.	26553, "Cast Away", 2000, Actor, Producer
awards\	The celebrity's nominated and received awards.	2001 "Academy Award", "Actor in a Leading Role", Winner
assets\	Image associated with the celebrity.	<a href="#">assets/62982_v9_bc.jpg</a>

## Celebrity Names

The XPATH in the table below is relative to:  
on/celebrities/person/localizedPersonNames/localizedPersonName

XPATH Element\Attribute	Description	Example
@nameId	Gracenote unique identifier for the celebrity name associated with the credited role.	171296
@primary	Flag indicating the primary name	true



XPATH Element\Attribute	Description	Example
localizedName/@language	Name language	en
localizedName/@sort	Flag indicating the sort name	true
localizedName/first/	First name	Roseanne
localizedName/last/	Last name	Barr

Celebrity names reflect name changes as well as different names in celebrity mediagraphy credits. The primary name flag is available.

personId	nameId	primary	lang	sort	Name - first	Name - last
56714	56714		en		Roseanne	
56714	56714		ja	true	ロザンヌ	
56714	153382		en		Roseanne	Arnold
56714	153382		ja		ロザンヌ・アーノルド	
56714	153382		ja	true	ロザンヌアーノルド	
56714	171296	true	en		Roseanne	Barr
56714	171296	true	ja		ロザンヌ・バー	
56714	171296	true	ja	true	ロザンヌバー	
56714	506184		en		Roseanne	Thomas

### Enhanced Celebrity Key Fields

“Enhanced Celebrity” metadata can be licensed and optionally added to the Celebrities endpoint. This metadata comes from the Gracenote “Studio Data” product and provides additional information and images that compliments the “core” celebrity metadata.

The following data dictionary shows the key elements and attributes for “enhanced” celebrity content. This content is distinct from the “core” content.

The XPATH in the tables below is relative to: on/celebrities/person

<b>XPATH Element\Attribute</b>	<b>Description</b>	<b>Example</b>
profile\deathPlace	The celebrity's place of death.	New York, New York USA
profile\deathCause	The celebrity's official cause of death.	Cardiac arrest
nationality	The celebrity's nationality	United States
ethnicity	The celebrity's ethnicity	American
participantTypes	Career role type. e.g. "Director"	Actor, Producer, Director, Writer
biographies	The factual, all-encompassing portrait of a subject's life and career, written in chronological order.	"With an on-screen persona so likable that he was often referred to as "America's Dad," Tom Hanks cemented..."
relationships	All family and partner relationships.	Companion, Wife, Rita Wilson
relationshipEvents	Significant relationship	Rita Wilson, "Began dating September, 1985."

XPATH Element\Attribute	Description	Example
	events, such as marriage and divorce and their respective dates.	
educations	Education information of the celebrity.	California State University, Sacramento, Theater
milestones	Career milestones of the celebrity.	2023, "Co-starred in the comedy "Asteroid City""
notes	Notes are interesting trivia items that give personal insight about their backgrounds and interests. Not all artists will have bio notes.	"Hanks collected manual typewriters, using them to write scripts and correspondence."
quotes	Insightful and/or humorous celebrity citations culled from published interviews. Not all artists	"Being a media darling is a fate I do not wish on my worst enemy..."

XPATH Element\Attribute	Description	Example
	will have quotes.	
enhancedAwards	Enhanced awards, to differentiate from “core” data awards	2022, Critics Choice Super Awards, Best Actor in a Science Fiction/Fantasy Movie, Nominee
highlights	A curated list of up to 10 interesting facts from the celebrity's personal and professional profile.	“Hanks, 68, was born on July 9, 1956 in Concord, CA with the name Thomas Jeffrey Hanks.”
socialMedia	The celebrity's official social media page links or ids.	Twitter, @tomhanks
baselineAssets	Enhanced Celebrity assets (images), to differentiate from “core” data images.	<a href="http://media.baselineresearch.com/images/2134666/2134666_full.jpg">http://media.baselineresearch.com/images/2134666/2134666_full.jpg</a>

### Celebrity Images

The XPATH in the tables below is relative to: on/celebrities/person/assets/asset

XPATH Element/Attribute	Description	Example
@assetId	Gracenote image identifier	s28719_lw_h15_ac
@type	MIME content type	image/png
@lastModified	Timestamp of last asset/metadata modification	2019-09-21T19:20:11Z
@width	Maximum image width	3840
@height	Maximum image height	2160
@category	Image category	Source Logo - dark
@ratio	Image aspect ratio	16:9
URI/	Relative Image URI	assets/s28719_lw_h15_ac.png

The image asset structure and general handling logic is common to images of all entities, however, categories and aspect ratios vary depending on the entity. The following table provides the core celebrity logo categories and aspect ratios.

Category	Description	Ratios
Photo - Headshot	Standard celebrity image	3:4

For more information, see the supplementary document [On API Image Category & Tier Definitions](#) (auto-download).

#### *Enhanced Celebrity Imagery*

The enhanced image assets are additive to the “core” image asset. The XPATH in the tables below is relative to: on/celebrities/person/baselineAssets/baselineAsset

XPATH Element/Attribute	Description	Example
@assetId	Gracenote image	1807001_full

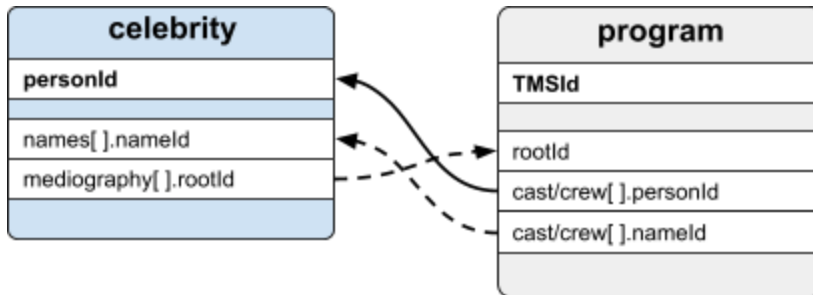
XPATH Element/Attribute	Description	Example
	identifier	
@type	MIME content type	image/png
@sizeType	Image size type	full
@width	Image width	3840
@height	Image height	2160
@category	Image category	Head Shot
caption/	Image caption	Roseanne Barr at arrivals for An Evening with the Cast of ...
url/	Full image URL	http://media.baselineresearch.com/images/1807001/1807001_full.jpg

Enhanced Celebrity images come in several categories and varying aspect ratios but include the image dimensions (width x height). For more information on Enhanced Celebrity imagery.

### Entity Relationship Diagram

The following ERD illustrates the ID relationships from a celebrity record to other relevant endpoint objects within On API.

- The personIds and namelds are referenced from the Program cast/crew credits.
- The mediography element has a program rootId which references a Program record with any TMSId title / description language.



## API and Example Responses

### API

<http://on-api.gracenote.com/v3/Celebrities>  
 ?updateId=[updateId value]  
 &limit=[limit value]  
 &api\_key=[your-api-key]

### Request Parameters

Parameter	Required?	Description
api_key	Yes	Your API key
updateId	No	Update token. Returns celebrities beginning with specified updateId, which is sequential numeric offset received in response.
limit	No	Batch size. Maximum number of celebrities to be returned by API. Use with updateId.
personId	No	<b>For non-batch lookups.</b> Comma-separated list of personIds for celebrity data.



**Important:** Use lookup calls for QA and troubleshooting purposes only. Gracenote does not support lookup APIs for Client production environments.

## Example Requests

Return full list of celebrities in batches of 1000:

```
http://on-api.gracernote.com/v3/Celebrities?updateId=0&limit=1000&api_key=<your-api-key>
```

Return a specific celebrity:

```
http://on-api.gracernote.com/v3/Celebrities?personId=100&api_key=<your-api-key>
```

The links is a response of default Celebrities data for The Rock:

```
http://on-api.gracernote.com/v3/Celebrities?personId=235135&api_key=<your-api-key>
```

## Example Responses

### [Celebrities XML examples](#)

### [The Rock Celebrities Response](#)

## Enhanced Celebrity Requests

Enhanced Celebrity is an additional entitlement to extend the Celebrities endpoint , including:

- Nationality
- Ethnicity
- Participant Types
- Biographies
- Relationships
- Relationship Events
- Education
- Milestones
- Notes
- Quotes
- Enhanced Awards
- Highlights
- Social Media
- Enhanced Images (baselineAssets)



The Celebrities endpoint provides a default data set, and with an additional entitlement, provides enhanced celebrity data. See [Data Dictionaries and Controlled Vocabularies](#).

### Enhanced Celebrity Example Responses

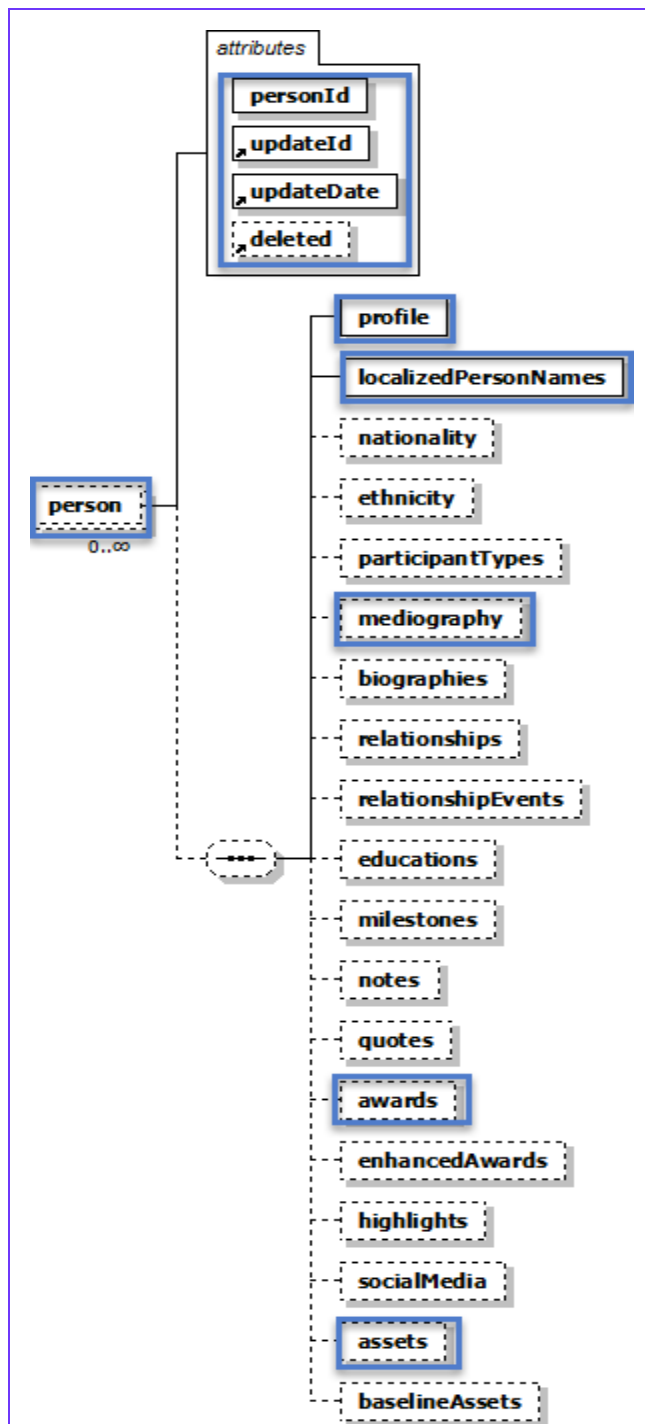
The links below are is a response of Enhanced Celebrity entitlement for The Rock:

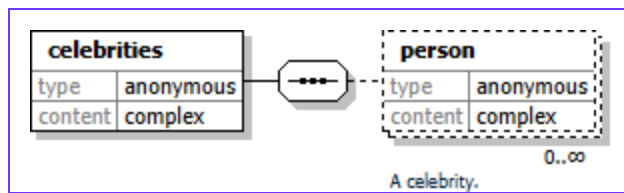
[http://on-api.gracenote.com/v3/Celebrities?personId=235135&api\\_key=<your-api-key>](http://on-api.gracenote.com/v3/Celebrities?personId=235135&api_key=<your-api-key>)

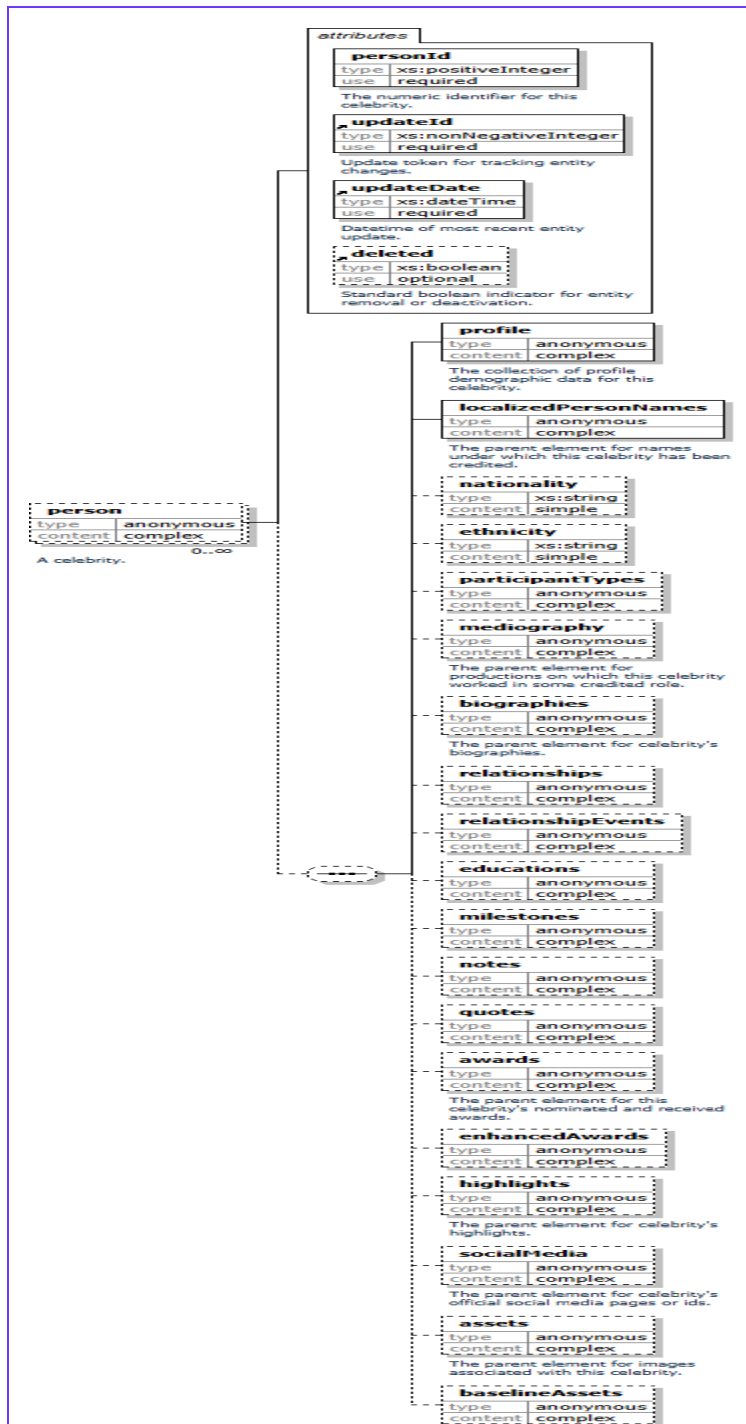
Response: ["The Rock" Enhanced Celebrity Response](#)

### Celebrities and Enhanced Celebrity Schema Diagrams

The Celebrities endpoint provides a default data set, and *with an additional entitlement*, provides Enhanced Celebrity data.. The diagram below shows the default Celebrities coverage in the **blue** boxes. Other fields indicate data provided through Enhanced Celebrity entitlement







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## Streaming Video (On Demand) Endpoints

Gracenote Streaming Video Catalogs (also known as On Demand) provide normalized metadata and over-the-top (OTT) availability details including deep links and viewing options, for movies and shows across streaming services in markets around the world, enabling universal search for events across streaming catalogs, and display of event metadata in a unified way across streaming catalogs.

Endpoint	Description
<a href="#"><i>Program Availabilities Endpoint (page 149)</i></a>	Provides access to catalogs from online streaming providers like Amazon, Hulu etc.
<a href="#"><i>Program Mappings Endpoint (page 159)</i></a>	Mapping information for programs on customer VOD catalogs; includes TMSId mapping to customer-provided asset IDs



**Note:** For example responses see: [\*On API Example Responses \(page 227\)\*](#). For implementation guidelines, see the [\*Gracenote On API Implementation Guide\*](#).

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## *Program Availabilities Endpoint*

The Program Availabilities endpoint provides access to programming information for various online streaming providers like Amazon, Hulu etc., including their pricing and availability information. This dataset is also called Online Video Data (OVD) .

Once licensed, the programs (TMSIDs) referenced in the catalogs will be available in the Programs endpoint as well. And information about the streaming provider will be available on the Stations endpoint.

Program Availabilities provide the most up-to-date information on online video availability and enables universal search along with other compelling consumer applications more quickly and reliably with one data feed rather than dealing with the complexity of accessing and validating data from multiple partners. The Gracenote consolidated video data is synchronized with the Gracenote Unique ID for ease of integration with most major industry datasets.

### ProgramAvailabilities API and Example Responses

#### API:

```
http://on-api.gracenote.com/v3/ProgramAvailabilities
?updateId=[updateId value]
&limit=[limit value]
&api_key=[your-api-key]
```

#### Request Parameters

Parameter	Required?	Description
api_key	Yes	Your API key
updateId	No	Program availabilities modified at or after updateId.
limit	No	Batch size. Maximum number of program availabilities to be returned, to be used in conjunction with updateId to specify batch size.



Parameter	Required?	Description
tmsId	No	<b>For non-batch lookups.</b> 14-char format tmsId. Accepts comma-separated list of TMSIds.



**Important:** Use lookup calls for QA and troubleshooting purposes only. Gracenote does not support lookup APIs for Client production environments.

### Example Requests

Return Program Availabilities for programAvailabilityId GNBBPAPA5BR8XF7. Using the providerId 1356240784 will return the same results.

[http://on-api.gracenote.com/v3/ProgramAvailabilities?updateId=0&limit=10&programAvailabilityId=GNBBPAPA5BR8XF7&api\\_key=123456789](http://on-api.gracenote.com/v3/ProgramAvailabilities?updateId=0&limit=10&programAvailabilityId=GNBBPAPA5BR8XF7&api_key=123456789)

### Example Responses

See [Program Availability XML examples](#)

### Data Structure and Relationships

The Program Availabilities XSD schema file is located here:

[http://files.api.gracenote.com/xsd/on\\_update\\_programAvailabilities\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_programAvailabilities_3.23.xsd)

The XPATH in the tables below is relative to:  
on/programAvailabilities/programAvailability

XPATH Element/Attribute	Description	Example
@availabilityId	Identifier for the program availability	GN3DGTJ7BCV2WPD
catalogName	Name of the streaming catalog	Amazon PV US
availableFromDateTime	Optional availability window start	2022-11-11T00:00:00Z

XPATH Element/Attribute	Description	Example
	date	
expiresAtDateTime	Optional availability window expiration date	3333-01-01T00:00:00Z

The availabilityId uniquely identifies a catalog + Gracenote TMSId + videoQuality (see Viewing Options below). Availability window dates/times may or may not be present, depending on the catalog and specific assets. Assets with availability window are only present in the API during the availability window - with the exception of programs typed Sports event, which can be present ahead of the stated availability window.

### Identifiers and Deeplinks

XPATH Element/Attribute	Description	Example
ids/id	Identifier associated with the asset	EP013898090001, 8553064, amzn1.dv.gti.a1b50383-d60a-4296-a6bd-ae3013ca6c82:US
ids/id/@type	Identifier type	tmsId, rootId, prgSvcId, providerId
urls/url	URL associated with the asset	http://www.amazon.com/gp/product/B0B8NBP1WV
urls/url/@type	URL type	web, ios, android, android_tv, stb, tizen, webos

The identifier section includes Gracenote and provider identifiers. Gracenote identifiers are: Program TMSId and rootId, as well as Source prgSvcId (identifies a catalog). For additional information on Gracenote identifiers, please refer to the corresponding section - [Programs Endpoint \(page 97\)](#) or [Sources Endpoint \(page 71\)](#). Provider identifiers consist of at least an asset providerId but can also include other (e.g. season or series level) identifiers.

Multiple assets can be assigned the same Gracenote TMSId - but not vice versa i.e. each asset will only have one assigned TMSId.

Deep links of the type web are included for all catalogs. Deep links for other device types may or may not be included depending on the provider.

### Viewing Options

The XPATH in the table below is relative to:  
on/programAvailabilities/programAvailability/viewingOptions/viewingOption

XPATH Element/Attribute	Description	Example
license	Video asset acquisition/payment method	purchase, subscription, rental, authentication, free
price	Video asset purchase/rental price	3.99
price/@currency	Video asset price currency	USD, CAD, EUR, GBP, ...
videoQuality	Video asset video quality	SD, HD, HD+, UHD

The Viewing Options are available for watchable assets (movies, episodes), but not for series.

## Provider Data

XPATH Element/Attribute	Description	Example
providerData/datum/key	Video asset provider specific data key	createdAtDate, p_rating, colorspace, show_id, season_id, airtime, ovd_image_url
providerData/datum/value	Video asset provider specific data value	2022-12-28 06:51:06 UTC, 18+, SDR, ...

The provider data key/values are optional passthrough data from the provider, not edited by Gracenote except for keys being normalized against a CV. The availability and coverage of specific keys is provider-dependent and varies greatly - some keys are only available for single catalogs. For the list of provider data keys, please refer to the below Referenced CV Lists table.

## Referenced CV Lists

Key	Values (description)
id@type	tmsId, rootId, prgSvcId, (Gracenote identifiers) providerId, providerSeriesId, providerSeasonId (provider identifiers)
url@type	web, ios, android, ...
license	free, rental, purchase, subscription, authentication (via cable provider)
videoQuality	SD, HD, HD+, UHD
providerData keys	createdAtDate (Gracenote asset record creation timestamp), airtime (event/video start time according to provider), p_rating (parental rating according to provider, w/o rating body), show_id, season_id (provider identifiers for series/season parent), original_content (boolean flag, according to provider) ovd_image_url (single provider image, passthrough - not curated by GN), colorSpace (color dynamic range from provider - SDR HDR10), studioName (studio associated with production of the video), ...

The [Supplemental Controlled Vocabulary](#) (auto-download) provides more comprehensive descriptions and examples for Availability-related lists.

## Data Attributes in the Program Availabilities Dataset

Consistent with audience popularity, the majority of content covered by the Program Availabilities dataset is comprised of high-quality long form content available on major streaming provider catalogs.

Short-form content (such as, previews, interviews, movie trailers, etc.), music videos, sports, instructional, and user-generated content are not currently covered by the Program Availabilities dataset.

Online videos can be available on a number of platforms and devices for end viewer consumption. Gracenote understands that partners use Gracenote data to power experiences on a wide variety of devices and provides links for the following platforms for available catalogs:

- Standard Web URL
- iOS
- Android
- Dedicated Set Top Box
- Connected Device/SmartTV

Playability by platform is subject to change. Mobile playability may vary by device.

### Host Logo Types

The Program Availabilities delivers image references for individual host logos. Host logos are available in four types. You should download the host logos and resize them as needed for your specific application.

Alpha Light	1076x720 pixels, PNG, transparent background, suitable for light backgrounds.
Alpha Dark	1076x720 pixels, PNG, transparent background, suitable for dark backgrounds.
Solid Light	1076x720 pixels, PNG, solid white background, suitable for light backgrounds.
Solid Dark	1076x720 pixels, PNG, solid black background, suitable for dark backgrounds.

#### Alpha Light



#### Alpha Dark



Solid Light

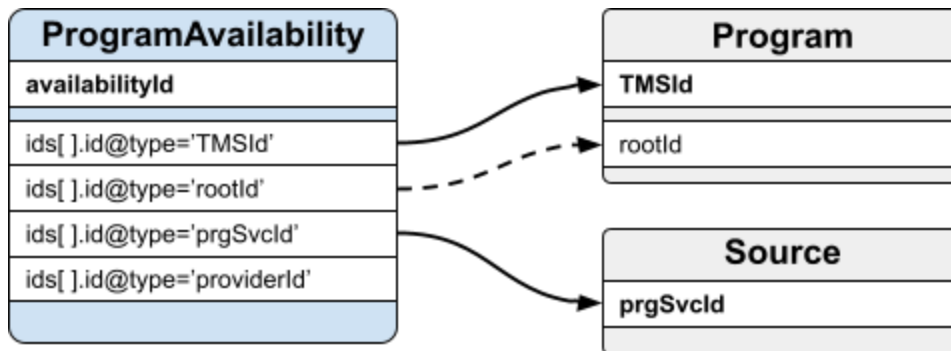


Solid Dark

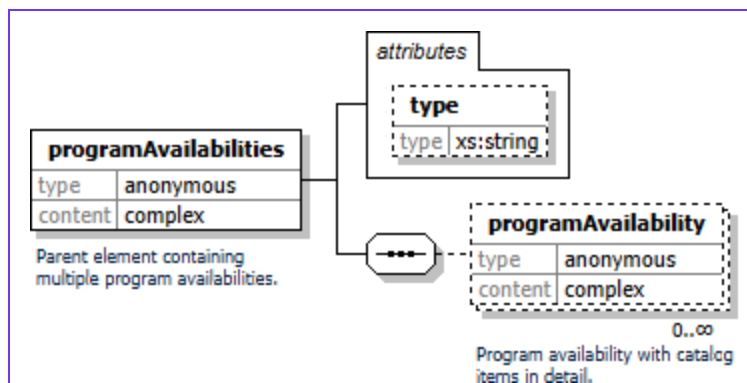


### Entity Relationship Diagram

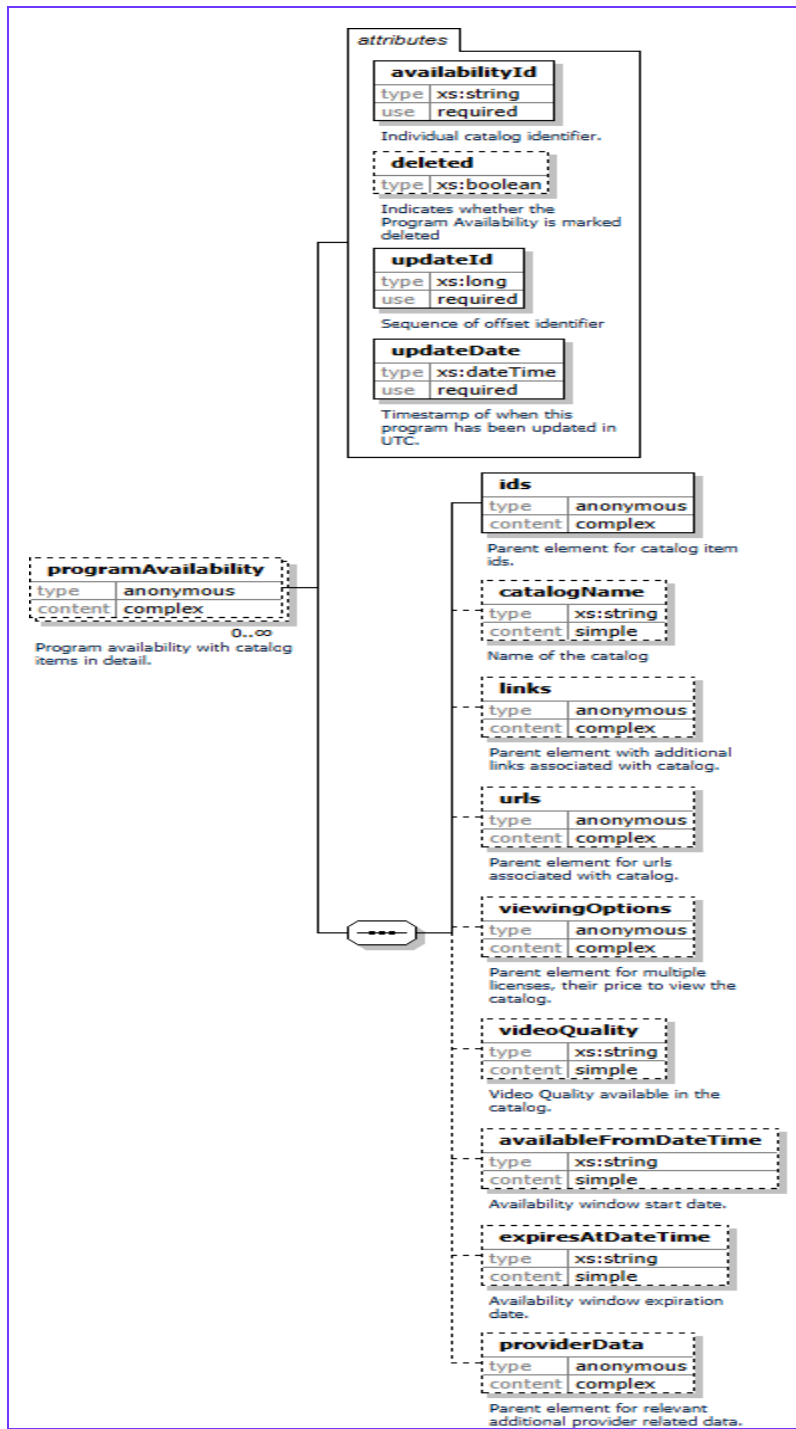
The ProgramAvailabilities endpoint works in conjunction with the Programs endpoint. The ProgramAvailabilities endpoint contains the links between TMSIds and provider asset identifiers, the Programs endpoint includes the actual metadata for all referenced TMSIds, including Series records for any referenced Episodes.



## ProgramAvailabilities Schema Diagrams







## *Program Mappings Endpoint*

The Program Mappings endpoint delivers mapping information for customers using Gracenote's VOD Program Services. The endpoint provides up-to-date information for asset mapping requests received, mappings completed, and assets unable to be mapped. On API can be configured to deliver mapping and program information for one or more customer catalogs.

The ProgramMappings endpoint works in conjunction with the Programs endpoint. While the ProgramMappings endpoint includes links between TMSIDs and customer asset IDs, the Programs endpoint includes the metadata for all referenced TMSIDs, including Series records for any referenced Episodes.

Program Mappings endpoint includes a full customer asset catalog, regardless of availability window. Mapping updates reflect changes to any asset mappings, including out-of-window assets if updated due to Gracenote's receipt of new metadata or request for remapping.

The schema provides mapping information, including:

- TmsId, for linking to Programs API
- ProviderId, for linking to customer assets
- Status, for information on mapping stage
- Availability window provided by the customer dataset
- Catalog name, useful for customers providing multiple catalogs for mappings

## API and Example Responses

### API

```
http://on-api.gracenote.com/v3/ProgramMappings  
?updateId=[updateId value]  
&limit=[limit value]  
&api_key=[your-api-key]
```

## Request Parameters

Parameter	Required?	Description
api_key	Yes	Your API key
updateId	No	Program mappings modified at or after updateId.
limit	No	Batch size. Maximum number of program mappings to be returned, to be used in conjunction with updateId to specify batch size.
programMappingId	No	<b>For non-batch lookups.</b> Accepts comma-separated list of programMapping IDs.
tmsId	No	<b>For non-batch lookups.</b> 44-char tmsId format. Accepts comma-separated list of TMSIDs.
providerId	No	<b>For non-batch lookups.</b> Customer-specific providerId for mappings assets. Accepts comma-separated list of providerIds. Use lookup calls for QA and troubleshooting purposes only. Gracenote does not support lookup APIs for Client production environments.



**Important:** Use lookup calls for QA and troubleshooting purposes only. Gracenote does not support lookup APIs for Client production environments.

## Example Requests

Return mapping updates in batches of 1000:

```
http://on-api.gracenote.com/v3/ProgramMappings?updateId=0&limit=1000&api_key=<your-api-key>
```

Return current mapping data for set of programMappingIds:

```
http://on-api.gracenote.com/v3/ProgramMappings?programMappingId=28732938,2398237&api_key=<your-api-key>
```

## Example Responses

See [Program Mapping XML examples](#)

## Data Structure and Relationships

### Schema

Review the following XML schema definition (xsd) to learn about the data structure, fields, and types for this endpoint.

To explore the relationships among all endpoints, see the [interactive schema documentation](#).

### XML Schema URL

[http://files.api.gracenote.com/xsd/on\\_update\\_programmappings\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_programmappings_3.23.xsd)

The XPATH in the tables below is relative to:  
on/programMappings/programMapping

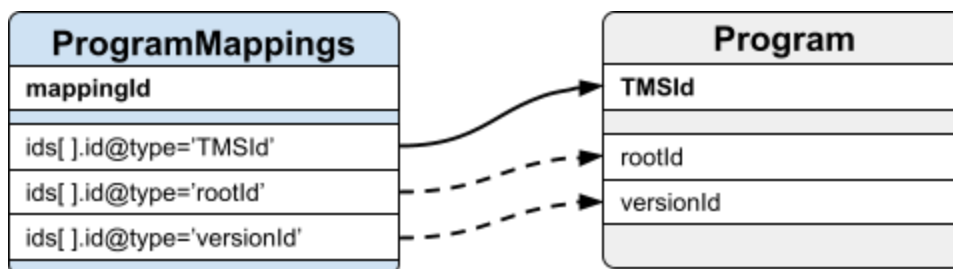
XPATH Element/Attribute	Description	Example
@programMappingId	Identifier for the program mapping, uniquely representing customer asset identifier and catalog pair	63940301
catalogName	Name of the catalog containing the program mapping	Disney Plus US
creationDate	Program mapping ingestion/creation date	2020-02-17 08:08:22
status	Mapping status: ToBeMapped, Mapped, Unmappable	Mapped

XPATH Element/Attribute	Description	Example
id@type	GN identifier of a given type: TMSId, rootId, versionId	EP030880640072 (TMSId)
link@idType	Customer asset identifier of a given type: ProviderId, PID (provider id), PAID (provider asset id)	35bb26dd-2f0b-43c1-87e7-486caff60948 (ProviderId)
availability/start	Content provider availability start date and time	2020-03-01T03:00:00Z
availability/end	Content provider availability end date and time	2022-11-12T03:00:00Z
message/@reason	The reason for Unmappable status	Insufficient Metadata, Metadata Discrepancy, Not Included in Current Agreement, Not in Scope for Gracenote Database, ...

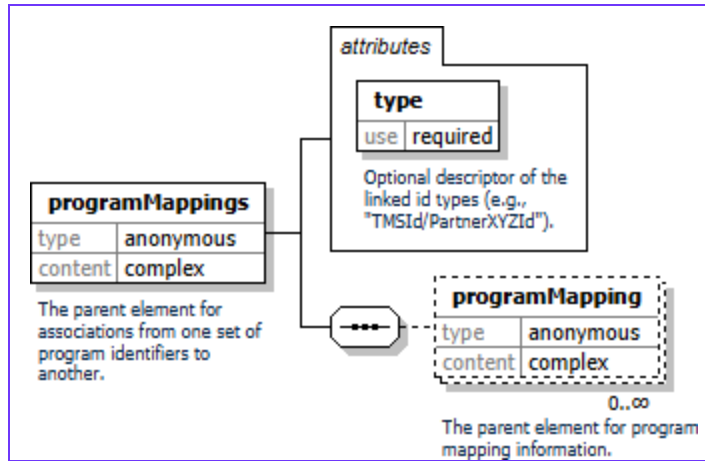
The [Supplemental Controlled Vocabulary](#) (auto-download) provides descriptions and examples for Mapping-related lists.

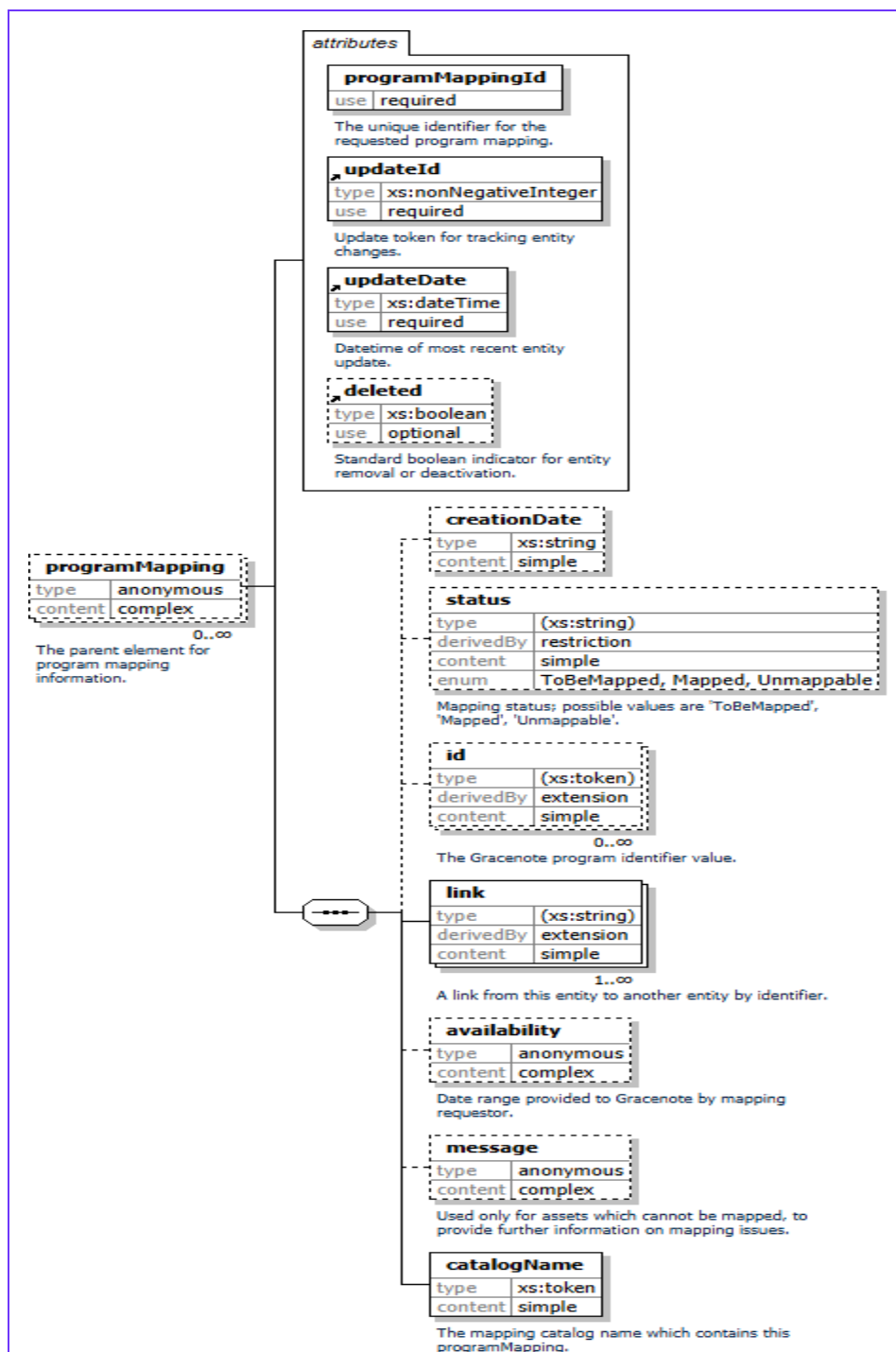
### Entity Relationship Diagram

The ProgramMappings endpoint works in conjunction with the Programs endpoint. The ProgramMappings endpoint contains the links between TMSIds and customer asset identifiers, the Programs endpoint includes the actual metadata for all referenced TMSIds, including Series records for any referenced Episodes.



## ProgramMappings Schema Diagrams





## Advanced Discovery Endpoints

Endpoint	Description
<a href="#"><i>Program Annotations Endpoint (page 167)</i></a>	Contains Program Video Descriptors for programs to optimized for search and discovery use cases.
<a href="#"><i>Video Descriptors Taxonomy Endpoint (page 173)</i></a>	A structured hierarchical relationship (parent/child tree) between descriptors.
<a href="#"><i>Video Popularity Endpoint (page 187)</i></a>	Assigns a numeric score to TV series and movies that represents the majority of the population's level of recognition of a video program.



**Note:** For example responses see: [\*On API Example Responses \(page 227\)\*](#). For implementation guidelines, see the [\*Gracenote On API Implementation Guide\*](#).



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## Program Annotations Endpoint

The Program Annotations endpoint supports the Program Video Descriptors feature. Typically, most programs are annotated with 20-30 video descriptors, but this can vary depending on the content. For example, a documentary movie may be lightly tagged compared to a live-action franchise movie based on a comic book. Within each Video Descriptor type, there can be anywhere from 1-5 video descriptors each. Specifically for Series, tagging is done at a show level covering over-arching descriptors across seasons and episodes.

For certain genres of programs, some types may not be relevant. In such cases, video descriptors from that type will not be present. See Video Descriptor Coverage

Each Program, identified by its TmsId, is annotated with Video Descriptors. The Program Annotations API provides the ID of the video descriptor. For each program object, Video Descriptors are grouped by video descriptor type. Within each video descriptor type, the video descriptors are sorted by descending order of importance. That is, the most important video descriptor for a given type appears first with ordinal number 1, followed by the next important video descriptor with ordinal number 2, and so on.

## API and Example Responses

### API

```
http://on-api.gracenote.com/v3/ProgramAnnotations
?updateId=[updateId value]
&limit=[limit value]
&api_key=[your-api-key]
```

### Request Parameters

Parameter	Required?	Description
api_key	Yes	Your API key

Parameter	Required?	Description
updateId	No	Programs modified at or after updateId.
limit	No	Batch size. Maximum number of programs to be returned. Use with updateId.
tmsId	No	For non-batch lookups. 14-char format tmsId. Accepts comma-separated list of TMSIds.



**Important:** Use lookup calls for QA and troubleshooting purposes only. Gracenote does not support lookup APIs for Client production environments.

### Example Requests

Return full program annotation set in batches of 1000 programs.

```
http://on-api.gracenote.com/v3/ProgramAnnotations?updateId=0&limit=1000&api_key=<your-api-key>
```

Return Program Annotations data for set of TMSIds.

```
http://on-api.gracenote.com/v3/ProgramAnnotations?tmsId=MV010087880000,MV010021180981&api_key=123456789
```

### Example Responses

See [Program Annotation XML examples](#)

### Identifying a Deleted Program Annotation

When a Program Annotation contains "deleted=true", it indicates that this annotation is no longer valid and can be deleted from your databases. For more information see [Removals \(Object Deletion / Inactivation\) \(page 11\)](#)

## Data Structure and Relationships

### Schema

Review the following XML schema definition (xsd) to learn about the data structure, fields, and types for this endpoint.

To explore the relationships among all endpoints, see the [interactive schema documentation](#).

### XML Schema URL

[http://files.api.gracenote.com/xsd/on\\_update\\_programAnnotations\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_programAnnotations_3.23.xsd)

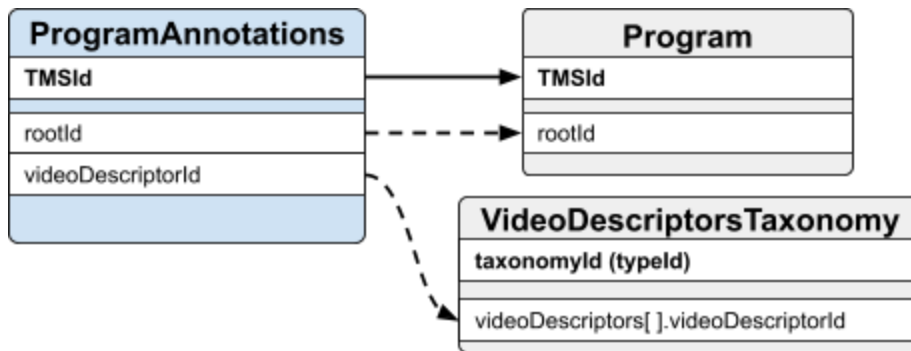
Unless stated otherwise, the XPATH in the tables below is relative to:  
on/programAnnotations/programAnnotation

XPATH Element/Attribute	Description	Example
@TMSId	Program TMSId, used as primary identifier for the Program Annotations record	MV009352300000
@rootId	Program root identifier	13316368
videoDescriptors/videoDescriptor/videoDescriptorId	Video descriptor identifier	GN1VBY6K9D0DWD4, GN0WQZ0H2MR816W
videoDescriptors/videoDescriptor/videoDescriptorId/weight	Weight assigned to a video descriptor	9,7,5

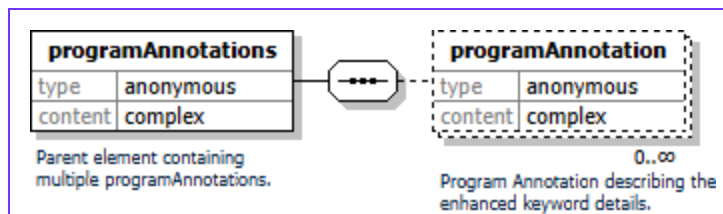
The order of descriptor assignments to the program is arbitrary and does not imply importance.

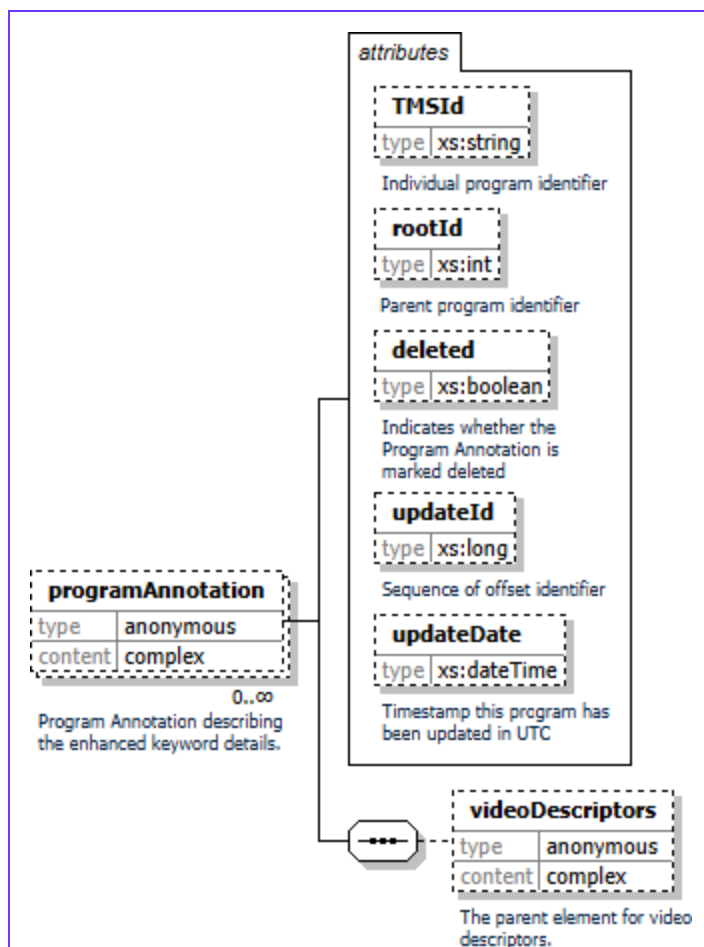
### Program Annotations Entity Relationship Diagram

The ProgramAnnotations endpoint works in conjunction with the Programs endpoint and VideoDescriptorsTaxonomy endpoint.



## ProgramAnnotations Schema Diagrams





## Video Descriptors Taxonomy Endpoint

Video Descriptors are a comprehensive data set of distinct descriptors that are bound by a unified Video Descriptor Taxonomy . These descriptors are optimized for search and discovery use cases. The data set is created by specially-trained Gracenote editors using a rigorous tagging process to ensure a high-quality and consistent metadata product. The Video Descriptors feature is sold separately. Contact your Gracenote representative to get this feature.

The Gracenote Video Descriptors Taxonomy (VDT) provides data to reconstruct a structured hierarchical relationship (parent/child tree) between descriptors. Taxonomy data is not very dynamic - the changes typically occur on a quarterly cadence and Gracenote usually distributes notifications about the taxonomy changes.

### API and Example Responses

#### API

```
http://on-api.gracenote.com/v3/VideoDescriptorsTaxonomy
?updateId=[updateId value]
&limit=[limit value]
&api_key=[your-api-key]
```

#### Request Parameters

Parameter	Mandatory?	Description
limit	No	To be used in conjunction with updateId to limit a response to specified number of Video Descriptor Types
typeId	No	For non-batch lookups. typeId in GNID format (Example: GNFMQH6ZGH1477N), provides all video descriptors that belong to the type. Accepts comma-separated list of IDs.
updateId	No	Unique update token, used to retrieve Video Descriptor Taxonomy data at a type level. Since the type is the most granular form of update from this endpoint, When a



Parameter	Mandatory?	Description
		keyword within a type is updated, a snapshot of all keywords that belong to that type is published. This can also be combined with the limit parameter to ingest specified batch size. For example, a limit of 1 provides all keywords belonging to one type. Using limit of 7 will provide all keywords currently available across 7 types.



**Important:** Use lookup calls for QA and troubleshooting purposes only. Gracenote does not support lookup APIs for Client production environments.

### Example Requests

Return Video Descriptor Taxonomy data.

```
http://on-api.gracenote.com/v3/VideoDescriptorsTaxonomy?updateID=0&limit=7&api_key=<your-api-key>
```

### Example Responses

See [Video Descriptor Taxonomy XML examples](#)

### Accessing Video Descriptors

You must integrate with two data delivery endpoints to fully access and use the Video Descriptors data set in your application.

- The Video Descriptor Taxonomy endpoint, and
- Either the Programs endpoint or the Program Annotations endpoint.

To access hierarchically organized Video Descriptors data, use the standalone Video Descriptor Taxonomy endpoint. You must integrate with this endpoint for full Video Descriptors data access.

To access the Video Descriptors specifically tagged to Programs:

Programs endpoint (recommended for On API v3.x customers):

- Gracenote can enable the Video Descriptors block within the Programs XML based on your entitlements.
- You can access Video Descriptors tagged to Programs in the overall Programs context. More information is available in the Programs endpoint topic.

#### Program Annotations endpoint:

- If you prefer to access only the Video Descriptors data for a program at the TMSId level, use the standalone ProgramAnnotations endpoint.
- Using this endpoint, you can access the Video Descriptors without having to parse through other Program information (like Title, Cast, Images, Release etc.)

### Video Descriptor Updates

Video descriptor updates are less frequent than other endpoints. It is anticipated that updates will happen quarterly, but may occur monthly if needed. You will be provided advanced notice of any upcoming taxonomy change.

Each Video Descriptor Taxonomy element is comprised of a single Type and its underlying keywords to simplify the referential integrity between versions. For example, if a Video Mood keyword 'Serious' is updated, you will receive all Video Mood keywords in the next update. Most updates are rolled into a single quarterly update for ease of processing. This means the update could contain simple label changes and/or changes to the hierarchy.

Types of changes that can be expected in the Video Descriptor Taxonomy include:

- New keyword added
- Keyword label change
- Keyword Delete
- Keyword parent change (Hierarchy change)
- New type addition with child keywords

When requesting updates, the most recent version of a video descriptor taxonomy is returned. Updates are not 'replayed' as a log of changes. For example, if a keyword label is modified once, and then modified again, the next call for updates includes the keywords from that type only once in the response, with latest updateId. For this reason, updateIds in a response are not consecutive, although video descriptor taxonomy output is sorted by updateId.

## Video Descriptors Taxonomy Data Structure and Relationships

### Schema

Review the following XML schema definition (xsd) to learn about the data structure, fields, and types for this endpoint.

To explore the relationships among all endpoints, see the [interactive schema documentation](#).

#### XSD Schema URL:

[http://files.api.gracenote.com/xsd/on\\_update\\_videoDescriptorsTaxonomy\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_videoDescriptorsTaxonomy_3.23.xsd)

The XPATH in the table below is relative to:  
on/videoDescriptorsTaxonomy/taxonomyItem/videoDescriptors/videoDescriptor

XPATH Element/Attribute	Description	Example
videoDescriptorId	Video descriptor identifier	GN7ZZYX4F3NN90Y
videoDescriptorName	Video descriptor name	ABBA
videoDescriptorParentId	Video descriptor parent identifier	GN9V5B4HXZG9X2J
typeId	Video descriptor type identifier the descriptor belongs to	GN5K25Z6A1Y4TYJ
typeName	Video descriptor type name	Subject - Specific Being / Group



**Important:** The update object in VideoDescriptorsTaxonomy endpoint is not an individual descriptor, but rather a taxonomy item carrying a list of descriptors of specific type/category. Furthermore, unlike the other endpoints, taxonomy items in the VDT endpoint do not carry a unique identifier. Instead, each descriptor in the taxonomy item contains a typeId which can be used as a unique identifier for the parent taxonomy item (it is the same on all descriptors in the taxonomy item).

```

<taxonomyItem updateId="0" updateDate="2024-03-14T22:10:40Z">
  <videoDescriptors>
    <videoDescriptor>
      <videoDescriptorId>GN7ZZYX4F3NN90Y</videoDescriptorId>
      <videoDescriptorName>ABBA</videoDescriptorName>
      <videoDescriptorParentId>GNB8TG1727QECG3</videoDescriptorParentId>
      <typeId>GN5K25Z6A1Y4TYJ</typeId>
      <typeName>Subject - Specific Being / Group</typeName>
    </videoDescriptor>
  </videoDescriptors>
</taxonomyItem>

```

## Video Descriptor Types

The Video Descriptors are organized in 16 types/categories (Character, Concept Source, Scenario, Theme, Video Mood, Setting (3 categories), Subject (8 categories), each category containing hierarchies of descriptors up to 4 levels deep, from more generic descriptors (roots) to more nuanced descriptors (leafs). The hierarchy trees are encoded in the videoDescriptorParentId links.

#	Descriptor Type	Definition
1	Scenario*	A specific situation, often personal or interpersonal, that sets the plot into movement, or moves it forward.
2	Video Mood*	A tone of the work, as expressed through the combination of story, characters, setting, dialog, art direction, cinematography, music, effects, etc.
3	Theme*	An abstract concept of human experience or character that the work addresses.
4	Character* (see also: Subject - Being or Group)	Party: A type of actual or fictional being/group, encompassing species, occupation, personality, relationship, nationality, ethnicity, religion, cultural affinities, physical / mental condition, life stage, etc. - that is a character in, or subject of, a work.
5	Concept Source*	The type of original source material that provides the inspiration or story for the work.

#	Descriptor Type	Definition
<b>Setting*</b>		When and where all, or a portion, of the plot is set
6	Time Period	A time period which is the setting for, or subject of, a work.
7	Place	Location: A type of physical environment which is the setting for, or subject of, the work - e.g. realm, area, specific outdoor or indoor environment.
8	Occasion	A type of occasion or event that is the setting for, or subject of, the work, e.g. personal, family, social, public, military, political, sports events.
<b>Subject*</b>		A specific topic that the work addresses
9	Milieu	A well-known combination of place and time, usually with additional explicit or implicit historical or cultural context that is the setting for, or subject of, the work.
10	Activity	A pursuit done for enjoyment, interest, or lifestyle outside of a professional context noted as a subject of the work.
11	Issue	An issue in the public awareness, e.g. cultural, societal, life phase, sexuality, paranormal, or criminal noted as a subject of the work.
12	Personal Issue	A mental state, emotion, personal quality or mental or physical condition noted as a subject of the work.
13	Practice	A professional, vocational, activist, scholarly, religious or artistic pursuit, or other committed endeavor noted as a subject of the work.
14	Specific Being or Group (see also: Character)	Party Object: An actual, fictional or spiritual person, group or organization noted as a character in, or subject of, the work.
15	Specific Location	Location Object: An actual, fictional or spiritual realm, celestial object, continent, region, country, state, province, city, building etc. noted as the setting for, or subject of, the work.
16	Specific	Event Object: An actual, fictional or spiritual event of the past,

#	Descriptor Type	Definition
	Event	present or future noted as a setting for, or subject of, the work.

(\*) indicates required descriptor types/categories.

Descriptor assignments to Programs carry one of the following numeric weights:

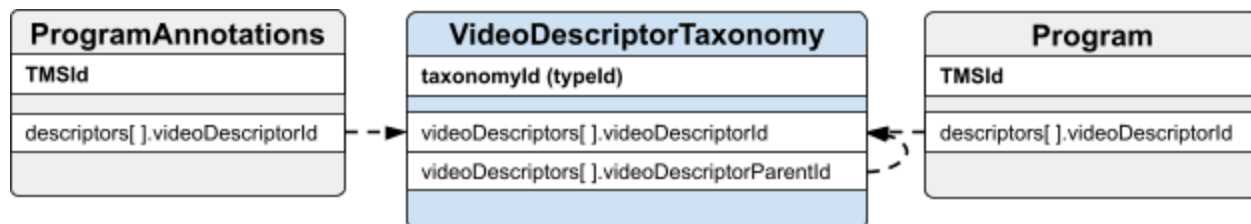
- 5 (significant aspect)
- 7 (major aspect)
- 9 (primary aspect)

### Translated Taxonomy

A non-English market client may need a translated taxonomy if they choose to show Video Descriptors on their UI. The translated values are available in the [Data Dictionaries and Controlled Vocabulary \(page 231\)](#) endpoint. The video descriptors taxonomy is translated into the following languages: Arabic, Chinese (Simplified), Chinese (Traditional), Czech, Danish, Dutch, Filipino, Finnish, French (France), Greek, German, Hebrew, Hindi, Hungarian, Indonesian, Italian, Japanese, Korean, Malay, Norwegian, Polish, Portuguese (Portugal), Portuguese (Brazil), Romanian, Russian, Spanish (Spain), Swedish, Tamil, Telugu, Thai, Turkish

### Video Descriptor Taxonomy Entity Relationship Diagram

The following ERD illustrates the ID relationships for Video Descriptor Taxonomy



## Video Descriptor Coverage

Video Descriptors data set was launched in early 2019, and Gracenote currently covers programs based on the customer's catalog and content available in a specific country. We prioritize programs for tagging using various signals such as popularity, Prime time TV programming, Theatrical releases, Historical Box office top grossing programs, and availability across top broadcasters and OTT providers.

Regarding Program coverage:

- Movies (MV records), including Feature Film, Short Film, TV movies are covered.
- TV Shows and Specials (SH records), including Series and Mini-series are covered.
- Episodes and Season level records are not covered.
- For a given Program, all associated TMSIDs are tagged with the same descriptors.
- Some of the excluded programming Genres include: Sports, Sports Non-events, Team Event, Weather, Shopping and Adult content.
- Most programs will have between 20-30 Video descriptors tags, although this can vary depending on the nature of the content. Fiction programming (most movies and TV shows) tend to have higher number of tags compared to Documentaries, Reality/Non-Fiction programming.
- Nine new descriptor types were introduced in Q3 2019 with the "Subject Release". Programs tagged before this release do not contain tags from these new descriptor types. Back-tagging is expected to be completed in early 2020. Please contact Gracenote if you need additional information on 'Back-tagging' coverage for "Subject-types".
- There are currently 16 types of Descriptors available in the Taxonomy. Only descriptors applicable to the content is tagged, so it is possible that a program does not have descriptors from all 16 types. For example, the fictional TV show 'Game of Thrones' will not have a "Subject- Specific Event" tag, which is suited for real-life /historical events or the nature documentary 'Planet Earth' will not have "Characters" typically used for fictional content.



**Note:** If you do have specific use cases that require coverage across excluded Genres or Program Types, please contact your Gracenote Account representative so that we can explore coverage options.

## Video Descriptors Types

Video Descriptors are classified into the following types of descriptors:

Type	Definition
Mood	A tone of the work, as expressed through the combination of story, characters, setting, dialog, art direction, cinematography, music, effects, etc.
Theme	An abstract concept of human experience that the work addresses
Scenario	A specific situation, often personal or interpersonal, that sets the plot into movement, or moves it forward
Concept Source	The type of original source material that provided the inspiration or story for the work
Character	Actual or fictional being/group relevant to a work, encompassing occupation, personality, relationship, nationality, ethnicity, religion, cultural affinities, physical / mental condition, life stage, etc.
Setting - Time	A time period in which all, or a portion, of the plot is set
Setting - Place	A type of physical environment in which all, or a portion of, the plot is set - realm, area, specific outdoor or indoor environment
Setting - Occasion	A global cultural, religious or national holiday or festival, or transitory personal event addressed in the work
Subject – Specific Location	A continent, region, country, state, province, celestial object, planet, solar system, fantasy worlds or supernatural realm noted as a subject of the work
Subject - Issue	A mental state, emotion, personal quality or mental or physical condition noted as a subject of the work
Subject – Personal Issue	A mental state, emotion, personal quality or mental or physical condition that impact one's being noted as a subject of the work
Subject – Specific Being/Group	An actual, fictional or spiritual person, group or organization noted as a subject the work



Type	Definition
Subject – Specific Event	An actual, fictional or spiritual event of the past, present or future noted as a subject of the work
Subject - Milieu	A well-known combination of place and time, usually with additional explicit or implicit historical or cultural context that is noted as a subject of the work
Subject Practice	A professional, vocational, activist, scholarly, religious or artistic pursuit, or other committed endeavor noted as a subject of the work
Subject - Activity	A pursuit done for enjoyment, interest, or lifestyle outside of a professional context noted as a subject of the work

### Video Descriptor Weights

Each video descriptor applied to a program is also accompanied by a weighting score. This adds a second dimension of relevancy to Gracenote video descriptors that can be used to further refine content analysis and recommendations. For computational purposes, descriptors will be measured on a 10 point scale, but for editorial simplicity and to discern clearly between the importance of each descriptor, weighting selections will be made on a 5 point scale of 1,3,5,7, and 9. However, today Gracenote editors only use the weights of 5, 7, and 9. This is so as only the most relevant aspects of a work are tagged. The following table further explains what is meant by each weight.

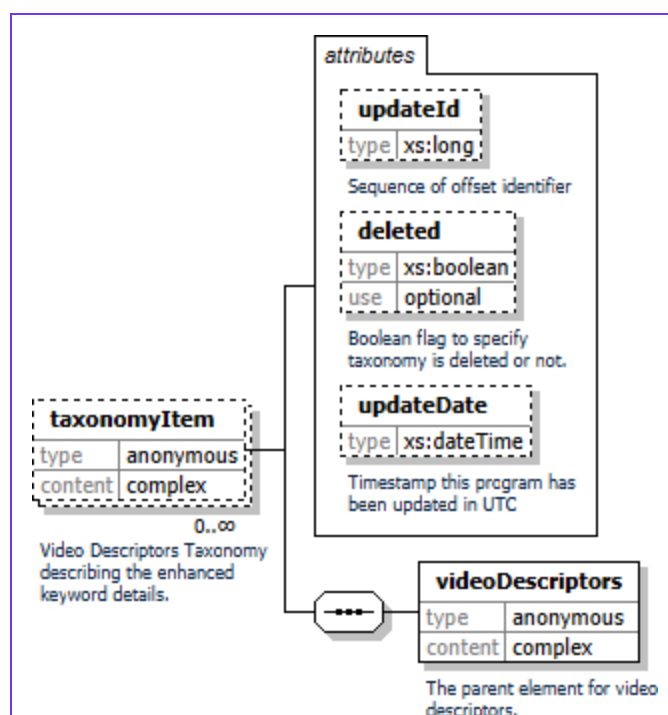
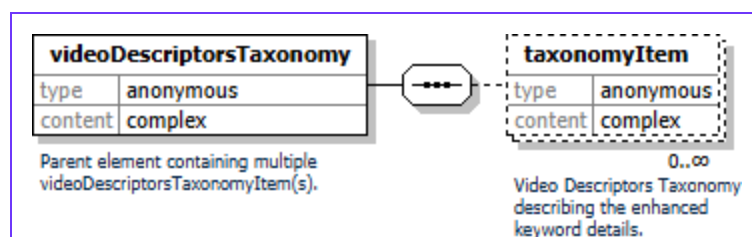
Weight	Description	Notes
1	Nominal information	Not used today
3	Minor program aspect	Not used today
5	Significant program aspect	Tags anything that is a significant part of the work, but not

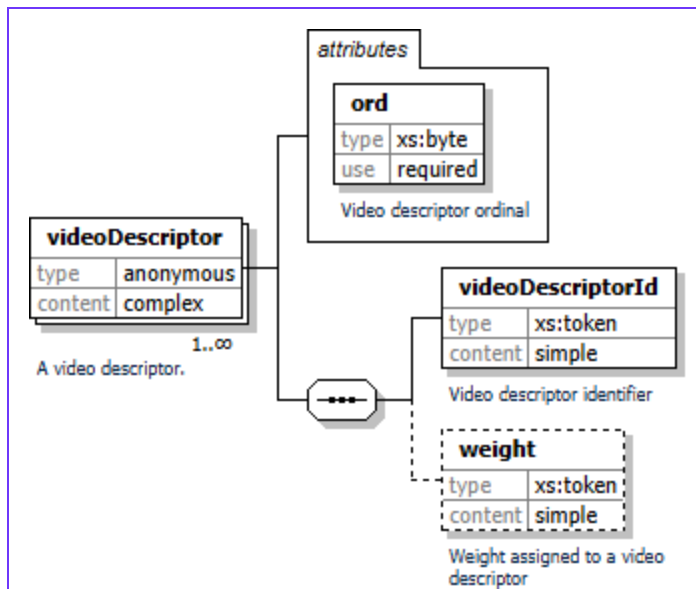
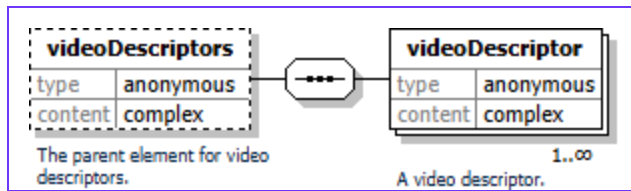
Weight	Description	Notes
		a primary or major focus.
7	Major program aspect	Tags very important details that are not the primary focus of the work.
9	Primary program aspect	Represents the most important descriptor per type. However, this can vary based on content, and more importantly, the 'type' because certain types are more likely to have multiple 9s than others, such as Character and the many Subject types.

One 9 is required in each type for it to be considered complete. 7s and 5s are applied only when a keyword is considered applicable. This means some types in a given work will just have 9s while others will have 9s and a combination of 7s and 5s. For example, consider the movie Deadpool. For mood the following tags were

applied: Visceral, Irreverent, Romantic, Thrilling, and Violent. Deadpool is a movie known for action and comedy so this would be an example when two 9s would be appropriate. In this case, that be Irreverent and Thrilling. From there, this film showcases violence, but that is not the primary focus. So visceral and violent are both 7s. Finally, although this film does focus on romance, it is not a major aspect relative to the other parts. Therefore, Romantic is weighted as 5. Overall, this weighting allows Gracenote to show, which moods are the most important when discussing Deadpool. It is similar to other programs tagged with Thrilling and/ or Irreverent, while also allowing for a different look for content similarity.

### Video Descriptors Taxonomy Schema Diagrams





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## Video Popularity Endpoint

Gracenote Video Popularity assigns a numeric score to TV series and movies that represents the majority of the population's level of recognition of a video program. Video Popularity data assigns a numeric 0 to 1 score to TV series and movies representing a general audience's level of recognition of a video program. The score is based on a proprietary algorithm applied across a combination of Gracenote and Nielsen data sources to ensure a high-quality and consistent metadata product. The scores are optimized for program search, discovery, and editorial curation use cases.

### API and Example Responses

#### API:

```
http://on-api.gracenote.com/v3/VideoPopularity
?updateId=[updateId value]
&limit=[limit value]
&api_key=[your-api-key]
```

#### Request Parameters

Parameter	Required?	Description
api_key	Yes	Your API key
updateId	No	Video popularities modified at or after updateId.
limit	No	Batch size. Maximum number of video popularities to be returned. Use with updateId.
tmsId	No	For non-batch lookups. 14-char tmsId format. Accepts comma-separated list of IDs.



**Important:** Use lookup calls for QA and troubleshooting purposes only. Gracenote does not support lookup APIs for Client production environments.

## Response Body

The table below shows parameters that may be included in Video Popularity response.

Attribute	Description
tmsId	The TMSId of a program
score	Numeric Video Popularity score value.
score_date	Date of the score.

## Example Requests

```
http://on-api.gracenote.com/v3/VideoPopularity?limit=1&api_key=<your-api-key>&tmsId=SH014483860000
```

## Example Responses

See [Video Popularity XML examples](#)

## Video Popularity Program Types and Coverage

Popularity scores are calculated at the Root Id level for a program. All programs that are associated with the same Root Id will have the same popularity score.

Gracenote US Video Popularity covers the following programs:

- Programs that have aired in the United States
- Released TV series at the series level
- Released Movies

Gracenote US Video Popularity does not cover the following programs:

- Sports programming (e.g. specific sports games)
- One-time specials (e.g. the Oscars)
- Local news programming
- Episode-level popularity

### Getting Seed Data and Updates

To download the entire endpoint, and to update it on a daily basis, follow the steps described here: [API Data Delivery \(page 5\)](#). Video Popularity scores for all programs are updated daily. You should check for updates regularly to ensure you are using the latest scores.

### About IDs in Video Popularity

You should use a program's TMSId to look up its Video Popularity score. This returns the Video Popularity data and some other IDs as described below:



ID Type	Description
Object ID	Video Popularity Object ID is an alpha-numeric ID that starts with "GN". Each Object ID is a unique identifier for the combination of Root ID + country + date for a program. These IDs are transient and change every day.. The "object" associated with the Object ID includes all of the relevant Video Popularity score information for the given program. Object IDs are not meant to be used for program lookups in the API.
Root ID	The program Root ID is the main ID associated with a program's Video Popularity score for a specific country. For example, the Video Popularity score in the US for the movie Titanic is associated with the Root ID for Titanic with US as the country of relevance. All relevant TMSIDs under the given Root ID will have the same Video Popularity score for that country.
TMSIDs	TMSIDs are 14-character alpha-numeric IDs that start with only "SH" or "MV". The TMSIDs returned for Video Popularity are likely the most relevant for a specific country, but they are not necessarily a complete list. All relevant TMSIDs for a given program Root ID will have the same Video Popularity score.

### Video Popularity Data Structure and Relationships

Popularity scores are calculated for programs at the rootId level - all programs that are associated with the same rootId will have the same popularity score. Video Popularity scores for all programs are updated daily. Check for updates regularly to ensure you are using the latest scores.

- Numeric score on a scale of 0-1 with 5 decimals is provided for each program
- Scoring algorithm weights multiple signals and factors including recency of release/airing

## Schema

Review the following XML schema definition (xsd) to learn about the data structure, fields, and types for this endpoint.

To explore the relationships among all endpoints, see the [interactive schema documentation](#).

### XML Schema URL

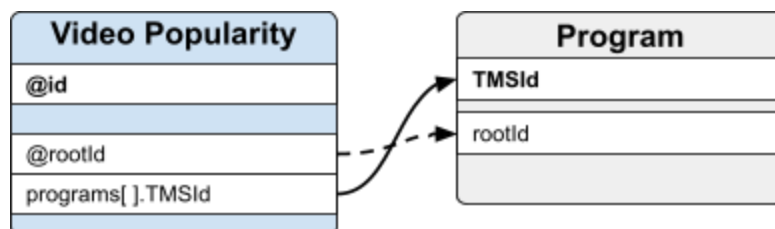
[http://files.api.gracenote.com/xsd/on\\_update\\_videoPopularities\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_videoPopularities_3.23.xsd)

The XPATH in the tables below is relative to on/videoPopularityScores/videoPopularityScore

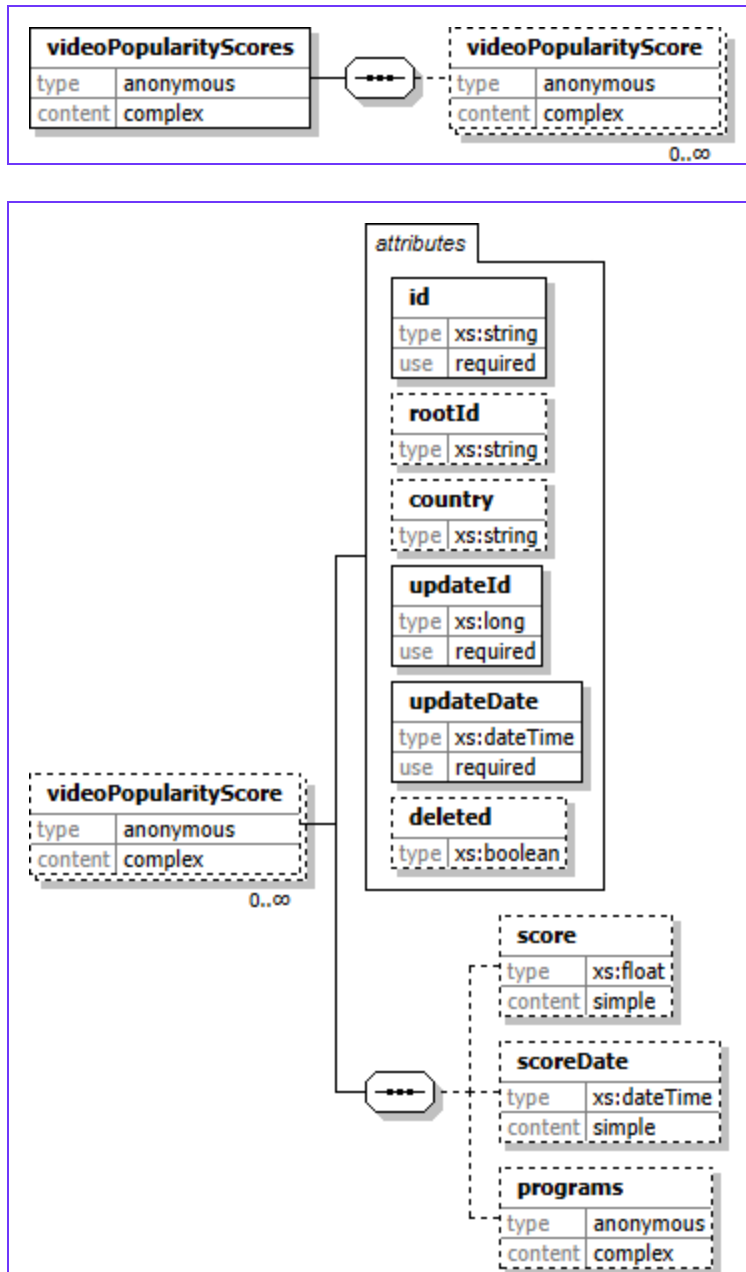
XPATH Element/Attribute	Description	Example
@id	Popularity record identifier	GNLZZJ4023NN4K5
@rootId	The rootId of the program	22676161
@country	Country associated with popularity record	USA
score	Video Popularity score value 0-1	0.62642
scoreDate	Date of the score	2024-05-20T00:00:00Z
programs/program/tmsId/	The TMSId(s) of the program	MV020141020000

## Entity Relationship Diagram

The following ERD illustrates the ID relationships from a Video Popularity record



## Video Popularity Schema Diagrams



## On Sports Endpoints (Subscription Only)



**Important:** On Sports is a limited availability (LA) release. It is available only through subscription. Please contact your Gracenote representative for access to these APIs.

*On Sports* enhances the viewing experience of sports on Pay TV platforms. By integrating comprehensive sports data with video content, On Sports delivers enriched and cohesive content experiences that drives audience engagement and tune-in.

### Key Features

- On Sports ensures a seamless integration of sports and video data, allowing you to build enriched experiences that captivate audiences and drive engagement with sports content.
- You can more easily integrate and implement sports data alongside video data, to create consistent, enriched sports guide and discovery experiences driving audience tune-in and engagement with sports programming.
- Empowers you to drive audience tune-in and engagement with sports programming through cohesive and enriched content experiences.
- Offers data licensing by league/tour per broadcast country, ensuring tailored solutions for your customers.

### Endpoints

Sports Endpoints	Description
<a href="#">Sports Endpoint (page 194)</a>	Sports metadata
<a href="#">SportsEvents Endpoint (page 196)</a>	Sports events metadata
<a href="#">Teams Endpoint (page 199)</a>	Team metadata
<a href="#">Universities Endpoint (page 205)</a>	University metadata for use with sports teams.

Sports Endpoints	Description
<a href="#">Venues Endpoint (page 209)</a>	Venue metadata.



**Note:** For example responses see: [On API Example Responses \(page 227\)](#) For implementation guidelines, see the [Gracenote On API Implementation Guide](#).

## Sports Endpoint

The Sports endpoint provides the names for the sport as referenced in the programs.

### API and Example Responses

#### API:

```
http://on-api.gracenote.com/v3/Sports
?updateId=[updateId value]
&limit=[limit value]
&api_key=[your-api-key]
```

#### Example Requests

Return full list of organizations.

```
http://on-api.gracenote.com/v3/Sports?updateId=0&limit=1000&api_key=<your-api-key>
```

### Request Parameters

Parameter	Required	Description
api_key	Yes	24-character key obtained during application registration
updateId	No	UUpdate token. Defaults to 0. Returns sports beginning with updateId, which is a sequential numeric offset received in response.

Parameter	Required	Description
limit	No	Batch size. Maximum number of sports to be returned by API. Use with updateId.
sportGId	No	<b>For non-batch lookups.</b> Comma-separated list of sportGIds. Overrides updateId.

## Data Structure and Relationships

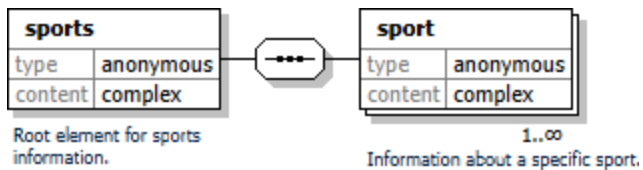
### Schema

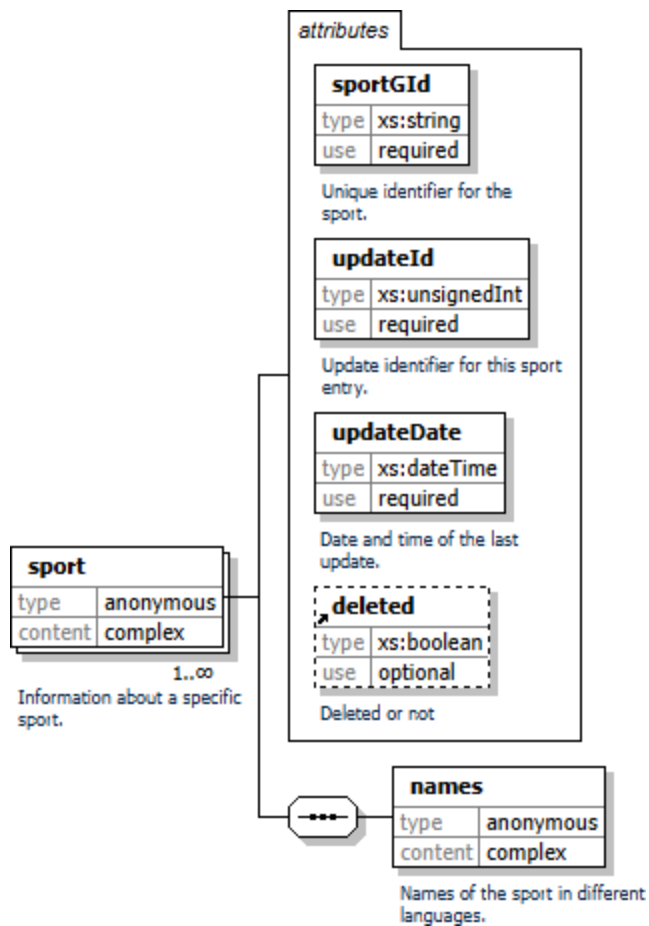
Review the following XML schema definition (xsd) to learn about the data structure, fields, and types for this endpoint.

To explore the relationships among all endpoints, see the [interactive schema documentation](#).

**XML Schema URL:** [http://files.api.gracenote.com/xsd/on\\_update\\_sports\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_sports_3.23.xsd)

### Sports Schema Diagrams





## SportsEvents Endpoint

The SportsEvents endpoint provides the information on the SportsEvent of type League, League\_Season, Phase and Match as referenced in the programs. Each type will give more detailed information on for example the teams participating in that league or the status and teams participating in a match.

## API and Example Responses

### API:

```
http://on-api.gracenote.com/v3/SportsEvents
?updateId=[updateId value]
&limit=[limit value]
&api_key=[your-api-key]
```

## Example Requests

Return full list of organizations.

```
http://on-api.gracenote.com/v3/SportsEvents?updateId=0&limit=1000&api_
key=<your-api-key>
```

## Request Parameters

Parameter	Required?	Description
api_key	Yes	24-character key obtained during application registration
updateId	No	Update token. Defaults to 0. Returns sports beginning with updateId, which is a sequential numeric offset received in response.
limit	No	Batch size. Maximum number of sports to be returned by API. Use with updateId.
sportEventGId	No	For non-batch lookups. Comma-separated list of sportEventGIds. Overrides updateId.

## Data Structure and Relationships

### Schema

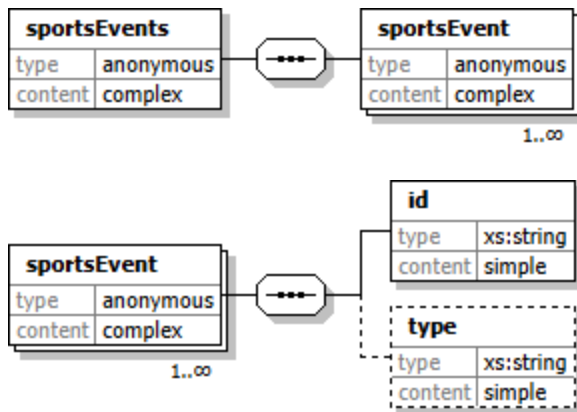
Review the following XML schema definition (xsd) to learn about the data structure, fields, and types for this endpoint.

To explore the relationships among all endpoints, see the [interactive schema documentation](#).

**XML Schema URL:** [http://files.api.gracenote.com/xsd/on\\_update\\_sports\\_events\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_sports_events_3.23.xsd)



## SportsEvents Schema Diagrams



## Teams Endpoint

The Teams endpoint provides metadata and imagery for the sports teams referenced by the Team Event programs. Team data is separated into a fixed team block (containing country, gender, location/university, members) and more dynamic/changeable teamBrand blocks (containing names, abbreviations, logos), only one of which is active at a time. This facilitates team name changes (for example New Jersey Nets, Brooklyn Nets).

### API and Example Responses

#### API

```
http://on-api.gracernote.com/v3/Teams
?updateId=[updateId value]
&limit=[limit value]
&api_key=[your-api-key]
```

#### Example Requests

Return full list of teams in batches of 1000:

```
http://on-api.gracernote.com/v3/Teams?updateId=0&limit=1000&api_key=<your-api-key>
key>3/Teams?updateId=0&limit=1000&api_key=<your-api-key>
```

### Request Parameters

Parameter	Required?	Description
api_key	Yes	24-character key obtained during application registration
updateId	No	Update token. Defaults to 0. Returns teams beginning with updateId, which is sequential numeric offset received in response.
limit	No	Batch size. Maximum number of teams to be returned by API. Use with updateId.
teamId	No	<b>For non-batch lookups.</b> Comma-separated list of teamIDs.

Parameter	Required?	Description
		Overrides updateId.



**Important:** Use lookup calls for QA and troubleshooting purposes only. Gracenote does not support lookup APIs for Client production environments.

## Response Body

Response	Description
teamId	numeric id used to specify team or sports franchise
updateId	numeric update token, used to determine starting point for next update request
updateDate	datetime of last modification
deleted	optional indicator, present only when value is 'true', to indicate team can be purged. Deletions are typically due to duplicate entry or other editorial issue
teamBrand	within franchise, collection of name and logo information. Team will include multiple teamBrands if team name has changed in past (for example, New Jersey Nets, Brooklyn Nets)
teamBrandId	numeric id used to specify teamBrand within team, referenced in program data
active	boolean indicating whether teamBrand information is currently active. Only one teamBrand per team is active at any given time. None may be active if team has been retired
officialName	official/long team name. For example, Arizona Diamondbacks
properName	leading portion of team name. For example, Arizona
nickName	ending portion of team name. For example, Diamondbacks
abbreviation	team abbreviation or shortened name. For example, ARI
assets	team logos, if available, are output for active or sole teamBrand, historical

Response	Description
	logos not provided. College teams will not include logos here, see University API for university logo
sport.genreId	sports genreId, indicating primary sport in which team participates
genres	collection of genres associated with team, based on organization memberships. May include non-sport-specific genres, such as Olympics, where applicable
genre	ID and name of associated sports genre
university	applicable only for college teams. Id and name of university
venue	provided if team has a designated primary venue. Id and name of venue
gender	value may be Male, Female, Mixed
member	parent element to hold team member name and type
type	team member type. Currently only 'Head Coach' is output
name	team member name, with nameId
type element	<p>(Currently optional) used to identify a team type. Each team is expected to have a type associated with it, and in a future release, the type element will be required. Types are:</p> <ul style="list-style-type: none"> <li>• National: a national team competing in international national team leagues like the FIFA World Cup.</li> <li>• Club: a club team competing in domestic and international club team leagues like the NFL and UEFA Champions League.</li> <li>• Defined: a double team consisting of two persons like a tennis or badminton double. All_Star: an all-star team competing during all-star matches as for example played in NBA, MLB, NHL and NFL.</li> <li>• Placeholder: a placeholder team used when the schedule of a league is already known, but the teams aren't yet.</li> <li>• Constructor: a constructor team as used in Formula 1 specifically.</li> </ul>
fromDate and toDate elements	(Optional) For teamBrands, fromDate and toDate used to determine the time period during which a teamBrand was/is active. Even though the fromDate and toDate elements are optional, each teamBrand is expected to have a fromDate and toDate associated with it. In future, these elements will be required. Gracenote will send out advance

Response	Description
	communication on when this change will be released.
names element	(Optional) For teamBrands to allow support for multiple alias types. The names element will publish a name with attributes of language and type. Each teamBrand is expected to have at least one name of lang='en' and type='default' associated with it.
colors element	(Optional) Used to identify the primary and secondary color associated with a team.
class element	<p>(Optional) Used to identify a team class. We have the following five classes:</p> <ul style="list-style-type: none"> <li>• Seniors: This class typically refers to adult athletes who compete at the highest level of their sport. It's usually the main professional or elite category.</li> <li>• Under 23: This category is designed for young adult athletes, usually between the ages of 18 and 22. It serves as a transitional phase between junior and senior levels.</li> <li>• Juniors: Junior classes usually encompass teenage athletes, typically ranging from 14 to 19 years old, depending on the sport.</li> <li>• Youth: Youth classes are generally for children and young teenagers, often ranging from around 8 to 14 years old.</li> <li>• Amateurs: This class includes athletes of various ages who participate in sports for enjoyment rather than as a profession.</li> </ul>
address element	(Optional) to provide more information about the address of the team with city, state and country details.
UniversityGld	(Optional) to identify the University associated with the team.
category "Flag"	For national teams. A team used to either have one logo associated with it, which could either be a flag or an actual logo. For national teams, we will now explicitly add the flag with the category "Flag". This automatically means the category "Logo" will only be used for actual (club and national) team logos.
category "Flag - circle"	For national teams. Circle flags are widely used to represent countries nowadays, so next to the square flag, we will also introduce a circle flag image with a width and height of 3000 (1:1), which will also be available for each national team.

## Example Responses

Below is an example response. Also see [Teams XML examples](#).

## Enriched Non-Team Events

Venue and time zone values is populated for non-team sports events to bring data parity with team-events. Non-Team Events (NTEs) are competitions in which the outcome is not predetermined and are not team versus team sports. Some examples of sports with event types NTE are Golf, Tennis, NASCAR, Bowling, etc.

## Data Structure and Relationships

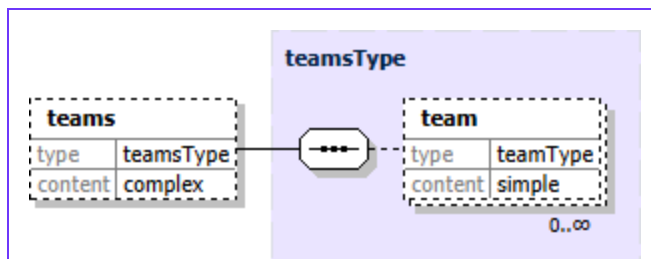
### Schema

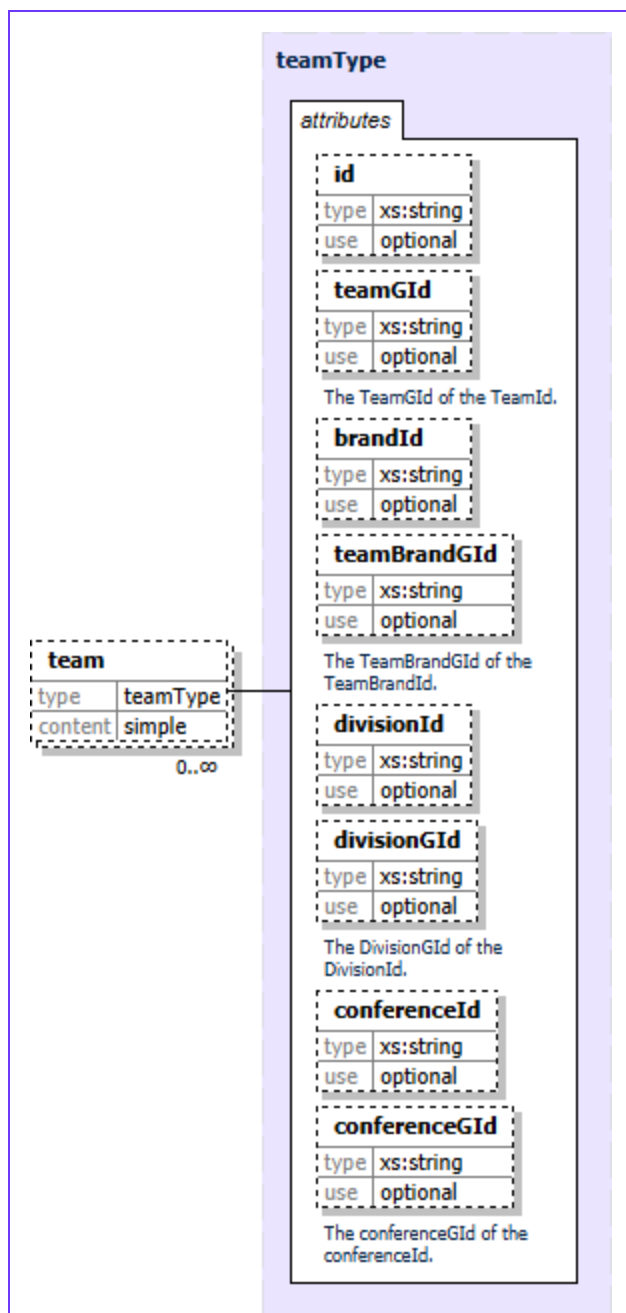
Review the following XML schema definition (xsd) to learn about the data structure, fields, and types for this endpoint.

To explore the relationships among all endpoints, see the [interactive schema documentation](#).

**XML Schema URL:** [http://files.api.gracenote.com/xsd/on\\_update\\_teams\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_teams_3.23.xsd)

## Teams Schema Diagrams





## *Universities Endpoint*

The Universities endpoint provides school and collegiate metadata and imagery for use with sports teams.

### API and Example Responses

#### API:

```
http://on-api.gracernote.com/v3/Universities  
?updateId=[updateId value]  
&limit=[limit value]  
&api_key=[your-api-key]
```

#### Example Requests

Return full list of universities:

```
http://on-api.gracernote.com/v3/University?api_key=<your-api-key>
```



## Request Parameters

Parameter	Required?	Description
api_key	Yes	24-character key obtained during application registration
updateId	No	Update token. Defaults to 0. Returns teams beginning with updateId, which is sequential numeric offset received in response.
limit	No	Batch size. Maximum number of universities to be returned by API. Use with updateId.
universityId	No	<b>For non-batch lookups.</b> Comma-separated list of universityIDs. If not specified, all universities are included in response.



**Important:** Use lookup calls for QA and troubleshooting purposes only. Gracenote does not support lookup APIs for Client production environments.

## Example Request

Return full list of universities:

[http://on-api.gracenote.com/v3/University?api\\_key=<your-api-key>](http://on-api.gracenote.com/v3/University?api_key=<your-api-key>)

## Response Body

Below is an example response.

Response	Description
id	numeric id used to specify university
name	university name
lastUpdDate	last datetime university data modified
assets	list of university logos, if available. Can be used as team logos for

Response	Description
	university's teams
universityGId	(Optional) will be added to uniquely identify university records.
names element	(Optional) will be added to allow support for multiple names. The names element will publish a name with attributes of language and type. Each university is expected to have at least one name of lang='en' and type='default' associated with it.
address	(Optional) address of the university with city, state and country details. These details will be optional and in future every university will have an address available.

### Example Responses

Below is an example response. Also see: [Universities record XML example](#)

### Data Structure and Relationships

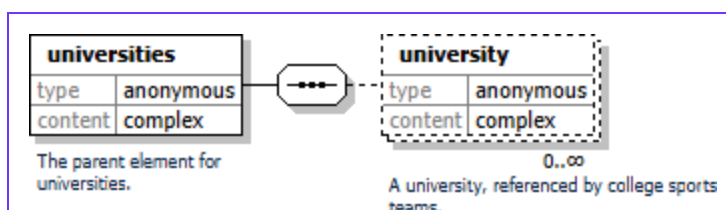
#### Schema

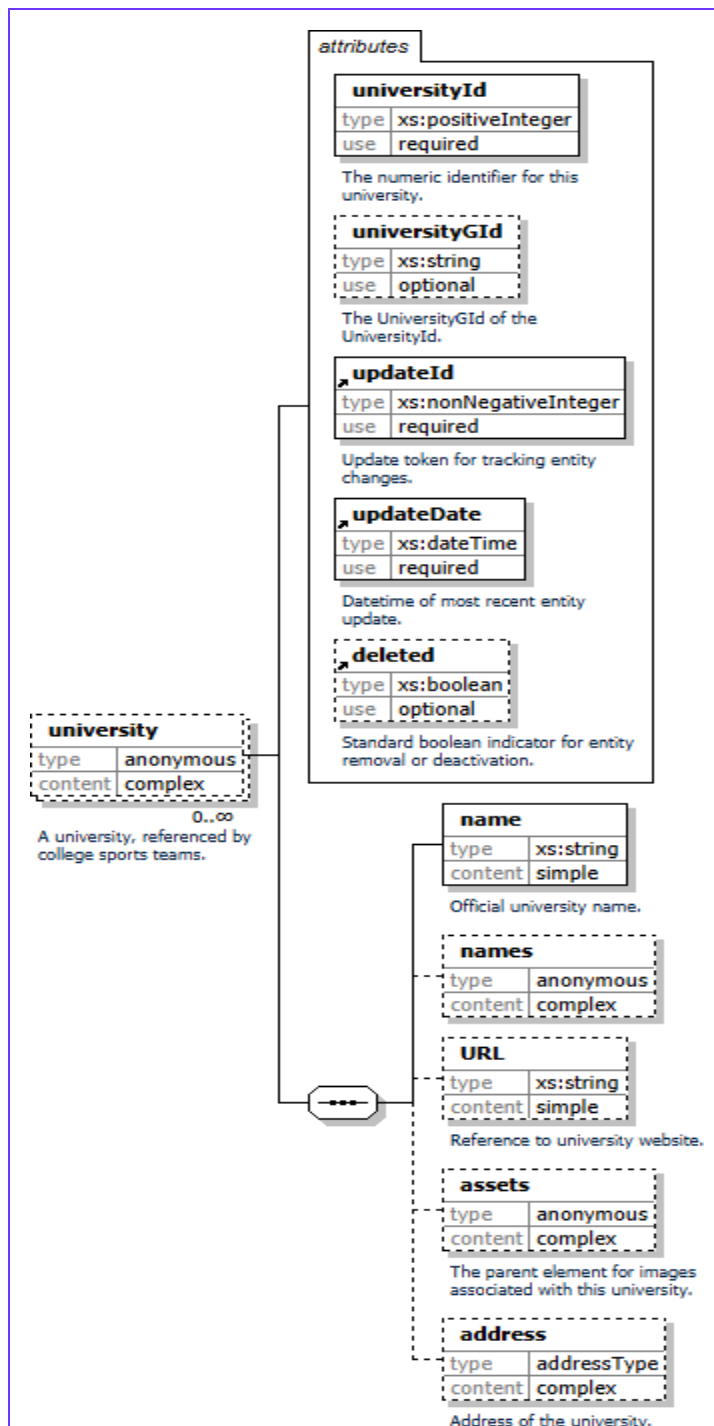
Review the following XML schema definition (xsd) to learn about the data structure, fields, and types for this endpoint.

To explore the relationships among all endpoints, see the [interactive schema documentation](#).

**XML Schema URL:** [http://files.api.gracenote.com/xsd/on\\_update\\_universities\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_universities_3.23.xsd)

### Universities Schema Diagrams





## Venues Endpoint

The Venues endpoint provides metadata for the sports venues that are referenced by the sporting event programs.

### API and Example Responses

#### API

```
http://on-api.gracernote.com/v3/Venues
?updateId=[updateId value]
&limit=[limit value]
&api_key=[your-api-key]
```

#### Example Requests

Return full list of venues in batches of 1000:

```
http://on-api.gracernote.com/v3/Venues?updateId=0&limit=1000&api_key=<your-api-key>
```

#### Request Parameters

Parameter	Required?	Description
api_key	Yes	24-character key obtained during application registration
updateId	No	Update token. Defaults to 0. Returns venues beginning with updateId, which is sequential numeric offset received in response.
limit	No	Batch size. Maximum number of venues to be returned by API. Use with updateId.
venueId	No	<b>For non-batch lookups.</b> Comma-separated list of venue IDs. Overrides updateId.



**Important:** Use lookup calls for QA and troubleshooting purposes only. Gracernote does not support lookup APIs for Client production



environments.

### Example Responses

Below is an example response. Also see [Venues XML example](#).

### Data Structure and Relationships

Venue data is separated into a fixed venue block (containing approximate address) and more dynamic/changeable venueBrand blocks (containing venue name), only one of which is active at a time. This facilitates venue name changes (for example Oracle Arena, Oakland Arena).

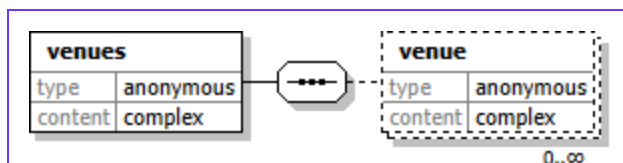
### Schema

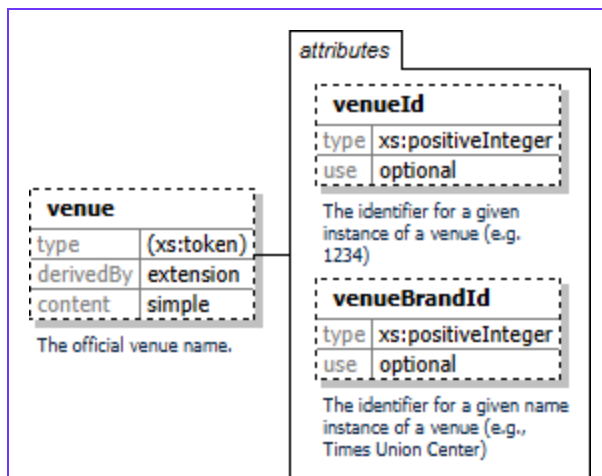
Review the following XML schema definition (xsd) to learn about the data structure, fields, and types for this endpoint.

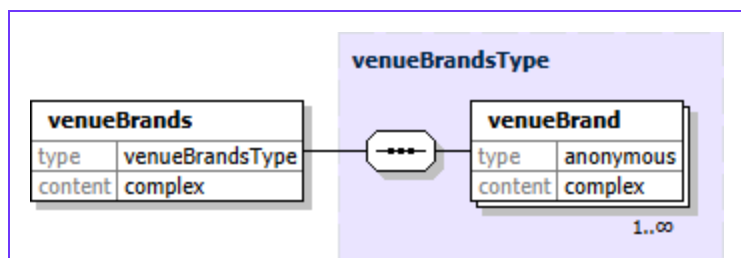
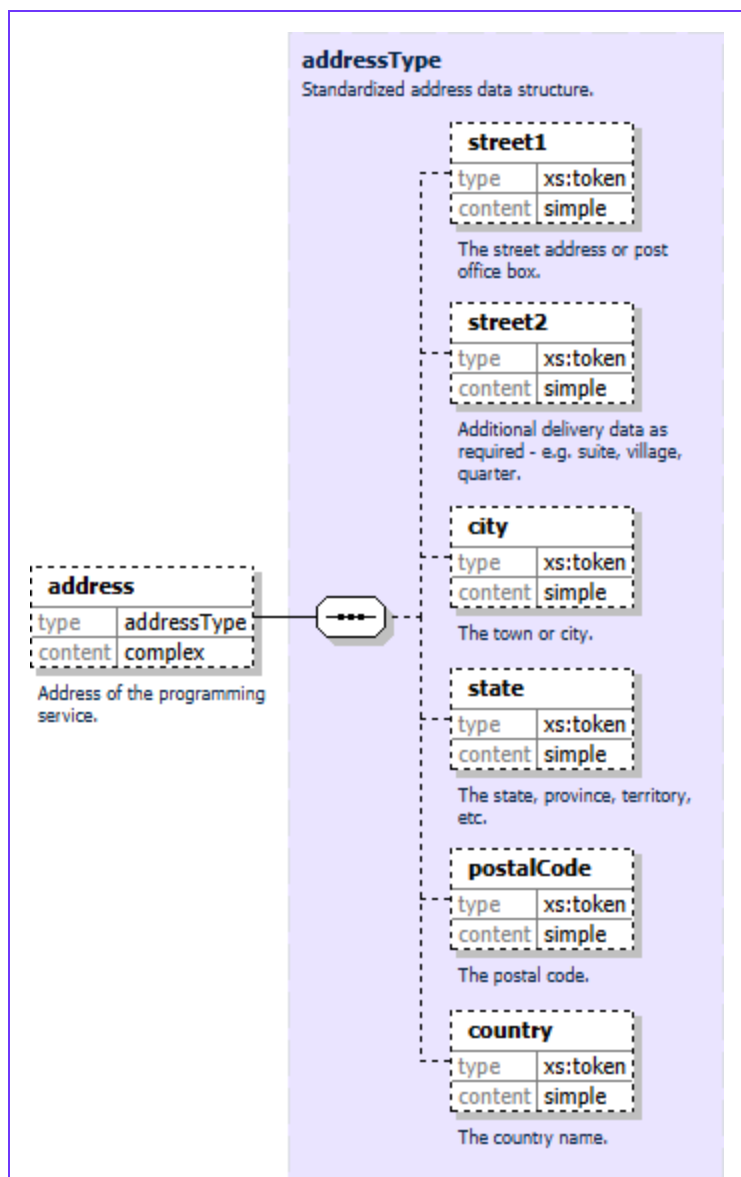
To explore the relationships among all endpoints, see the [interactive schema documentation](#).

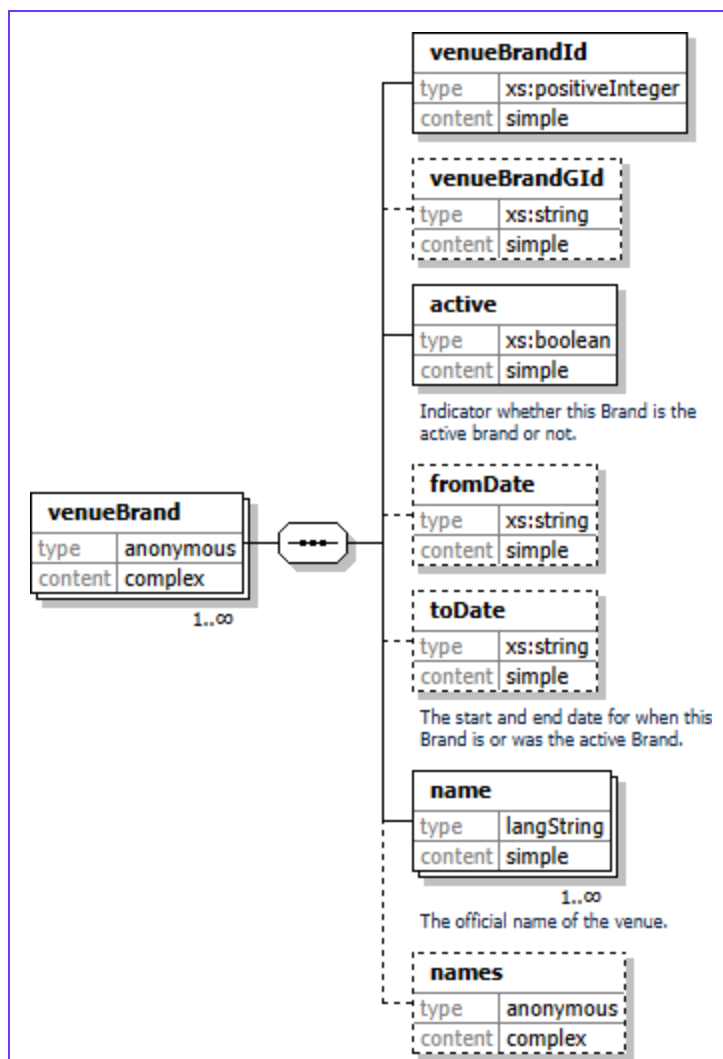
**XML Schema URL:** [http://files.api.gracenote.com/xsd/on\\_update\\_venues\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_venues_3.23.xsd)

### Venues Schema Diagrams











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## *Organizations Endpoint (Legacy)*

The Organizations endpoint provides *legacy* sports organization metadata. Beginning in On API v3.23, the [SportsEvents Endpoint \(page 196\)](#) endpoint entity represents the organizational structure of a sport. We recommend using SportsEvents instead of Organizations.

The SportsEvent type LEAGUE is at the top of the hierarchy. More granular event types such include LEAGUE\_SEASON, PHASE, ROUND, MATCH, etc. LEAGUE also contains teams, conferences, and divisions in the league.

The Organization endpoint includes links to corresponding SportsEvents entities such as LEAGUE or LEAGUE\_SEASON. Also Organization teams, conferences, and divisions include their On Sports identifiers to simplify migration from legacy Sports data to On Sports.

If you are using legacy Sports data, we recommend you migrate to On Sports. The legacy data will be discontinued in the future. Please contact your Gracenote representative for more information about migrating to On Sports. Also see the [On API Implementation Guide](#) for details.

### API and Example Responses

#### API:

```
http://on-api.gracenote.com/v3/Organizations
?updateId=[updateId value]
&limit=[limit value]
&api_key=[your-api-key]
```

#### Example Requests

Return full list of organizations.

```
http://on-api.gracenote.com/v3/Organization?api_key=<your-api-key>
```

## Request Parameters

Parameter	Required	Description
api_key	Yes	24-character key obtained during application registration
updateId	No	Update token. Defaults to 0. Returns teams beginning with updateId, which is sequential numeric offset received in response
limit	No	Batch size. Maximum number of organizations to be returned by API. Use with updateId.
organizationId	No	<b>For non-batch lookups.</b> Comma-separated list of organizationIds. If not specified, all organizations are included in response.

### Example Response

See: [Organization XML examples](#)

## Data Structure and Relationships

### Schema

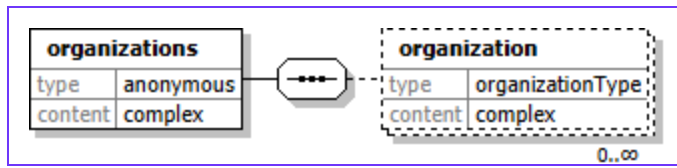
Review the following XML schema definition (xsd) to learn about the data structure, fields, and types for this endpoint.

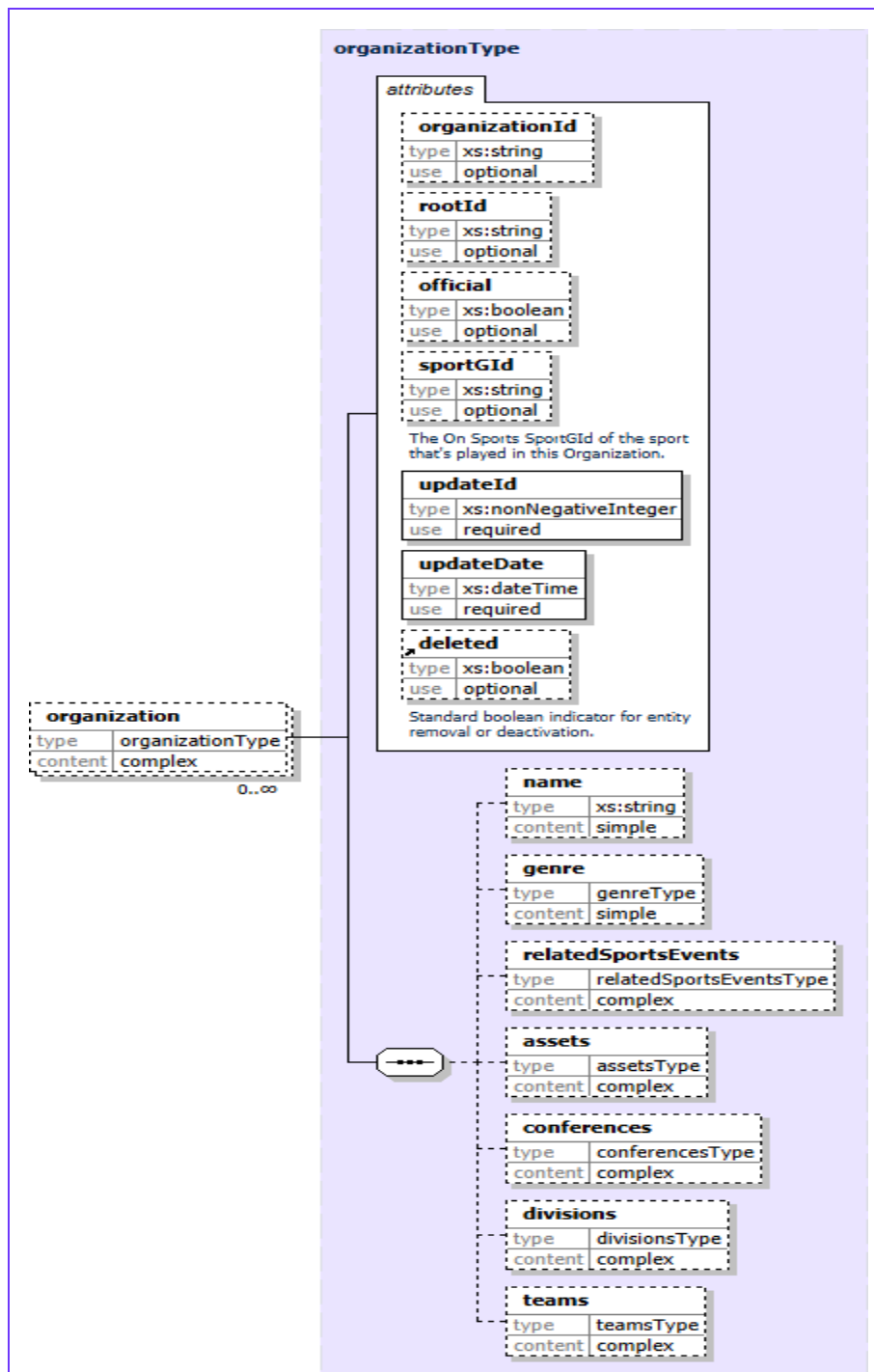
To explore the relationships among all endpoints, see the [interactive schema documentation](#).

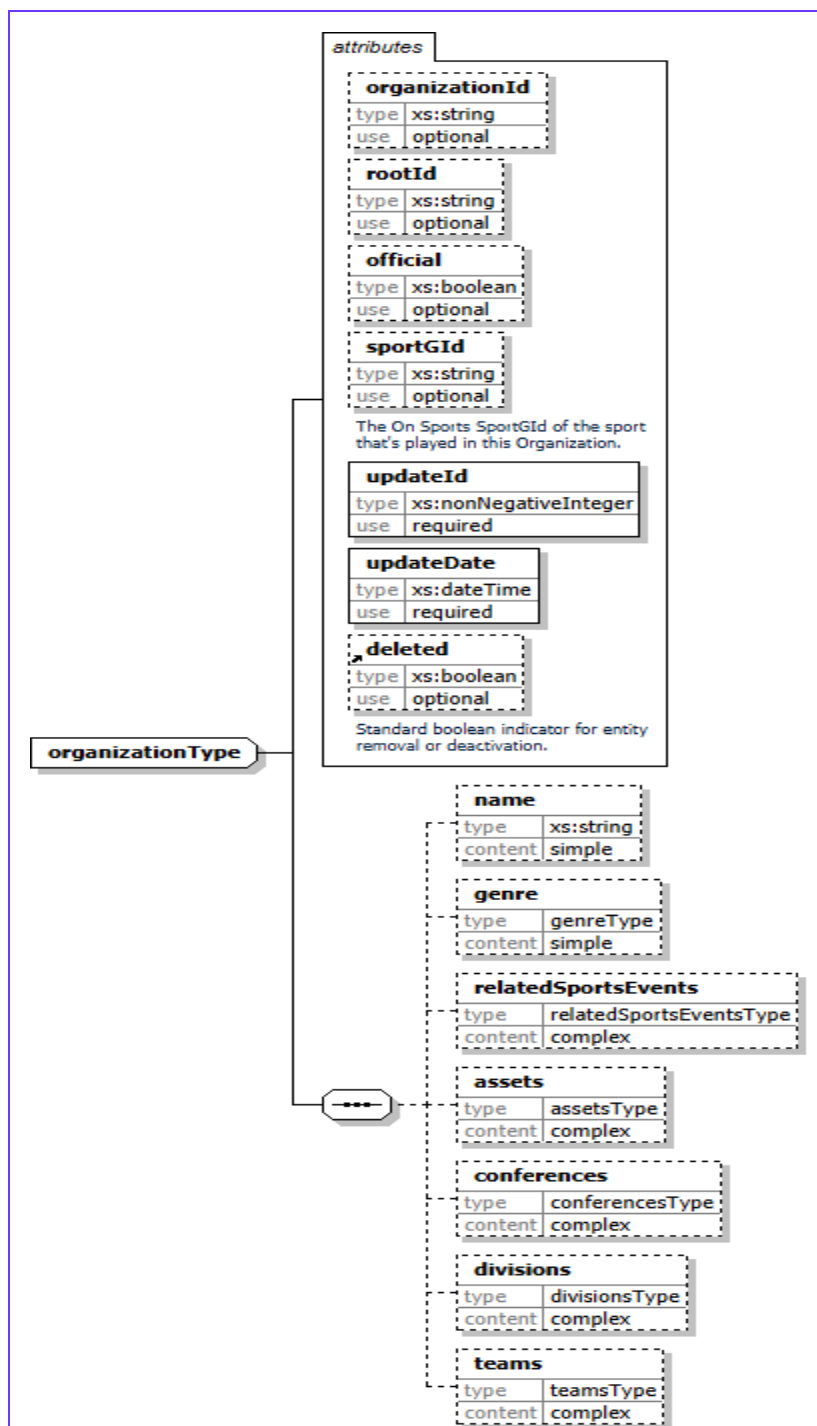
**XML Schema URL:** [http://files.api.gracenote.com/xsd/on\\_update\\_organizations\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_organizations_3.23.xsd)

Organization entity contains the rootId of a Program/Series associated with the organization.

## Organizations Schema Diagrams







organizationId	
type	xs:string
content	simple

## GN IDS SourcePrograms Endpoint

The Source Programs endpoint supports the source data delivery feature of [Gracenote ID Distribution System](#) (GN IDS). This is a separate product that works with On API. For additional information about GN IDS, please contact your Gracenote representative.

This endpoint delivers TV and Movie program metadata registered by GN IDS Content Owners. This metadata can be delivered directly (as-is) to distribution partners that license Gracenote data and can be entitled to limit access to specific distribution partners.

Owner-provided metadata is mapped to the industry-standard TMS ID for language-specific representation of programs. All programs are marked with a unique `updateId`, denoting the current dataset for the program. Scope of programs can be requested by schedule relevancy, language, or combination of criteria, dependent on customer need.

### API and Example Responses

#### API:

```
http://on-api.gracenote.com/v3/Source/Programs
?updateId=[updateId value]
&limit=[limit value]
&api_key=[your-api-key]
```

#### Request Parameters

Parameter	Required?	Description
api_key	Yes	Your API key
limit	No	Batch size. Maximum number of source programs to be returned. Use with <code>updateId</code> .
updateId	No	Returns Source Programs modified at or after <code>updateId</code> .



Parameter	Required?	Description
id	No	<b>For non-batch lookups.</b> Comma-separated list of Source Program IDs.



**Important:** Use lookup calls for QA and troubleshooting purposes only. Gracenote does not support lookup APIs for Client production environments.

### Example Request

```
http://on-api.gracenote.com/v3/Source/Programs?id=GNLZZXW0000004R&api_key=[your-api-key]
```

### Example Response

```
<?xml version="1.0" encoding="UTF-8" ?>
<on xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:noNamespaceSchemaLocation="http://files.api.gracenote.com/xsd/on_update_source_
programs_3.23.xsd"
  schemaVersion="3.20">
  <header>
    <content>On - Updates: SourcePrograms</content>
    <created>2025-02-17T18:56:21Z</created>
    <copyright>Copyright 2025 Gracenote, a Nielsen Company. All rights reserved.</copyright>
    <requestParameters>
      <requestParameter name="id">GNLZZXW0000004R</requestParameter>
    </requestParameters>
  </header>
  <programs>
    <program id="GNLZZXW0000004R"
      TMSId="MV016377830000"
      updateId="5205415154"
      updateDate="2023-05-02T22:15:15Z"
      deleted="true">
      <sourceDataProvider>
        <id>GNLZZZ40000003Y</id>
        <name>Internal GN IDS Trial</name>
      </sourceDataProvider>
    </externalIds>
```

```
<externalId primary="true"
  provider="true"
  label="MV016377830000">69274</externalId>
</externalIds>
<versionInfo>
  <labels>
    <label>Original</label>
  </labels>
  <releaseDate>2022-02-09</releaseDate>
  <colorCode>color</colorCode>
  <duration>600000</duration>
  <presentationLabels>
    <presentationLabel> Original ES</presentationLabel>
  </presentationLabels>
</versionInfo>
<titles>
  <title lang="en">Crescendo!</title>
</titles>
<descriptions>
  <desc size="250"
    lang="en">From a young age, Michael Fabiano was told he wasn't good
    enough. Now, a global talent, Michael reflects on a journey that led him to find stardom, and love,
    inside New York City's Metropolitan Opera.</desc>
  <desc size="100"
    lang="en">Michael Fabiano reflects on his journey as an operatic tenor.</desc>
  <desc size="60"
    lang="en">Opera singer Michael Fabiano finds his voice.</desc>
</descriptions>
<progType>movie</progType>
<subType>shortFilm</subType>
<genres>
  <genre>DOCUMENTARY</genre>
  <genre>MUSIC</genre>
  <genre>GAY/LESBIAN</genre>
</genres>
<yearOfRelease>2020</yearOfRelease>
<releases>
  <release>
    <date>2022-02-09</date>
  </release>
</releases>
<countries>
  <country>US</country>
```

```
</countries>
<productionStatus>completed</productionStatus>
<ratings>
  <rating code="TVPG"
    ratingsBody="USA PARENTAL RATING">
</rating>
</ratings>
<crew>
  <member ord="01">
    <name>
      <first>Alex</first>
      <last>Mallis</last>
    </name>
  </member>
  <member ord="02">
    <name>
      <first>Matt</first>
      <last>O&apos;Neill</last>
    </name>
  </member>
  <member ord="03">
    <name>
      <first>Perri</first>
      <last>Peltz</last>
    </name>
  </member>
  <member ord="04">
    <name>
      <first>Eliot</first>
      <last>Krimsky</last>
    </name>
  </member>
</crew>
</program>
</programs>
</on>
```

### SourcePrograms Data Structure and Relationships

For information about SourcePrograms data and its relationship to GN IDS data deliver, refer to the GN IDS documentation: [Gracenote ID Distribution System](#)

## Schema

Review the following XML schema definition (xsd) to learn about the data structure, fields, and types for this endpoint.

To explore the relationships among all endpoints, see the [interactive schema documentation](#).

**XML Schema URL:** [http://files.api.gracernote.com/xsd/on\\_update\\_source\\_programs\\_3.23.xsd](http://files.api.gracernote.com/xsd/on_update_source_programs_3.23.xsd)

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# On API Example Responses

## Example Responses on the Gracenote Help Center

Below are links to On API example responses on the Gracenote Help Center:

- [Linear Schedules | Unbound Data Endpoints](#)
- [On Demand Endpoints](#)
- [Advanced Discovery Endpoints](#)
- [Sports Endpoints](#)

## Additional Program Example Responses

Below are links to the XML responses of program types, subtypes, and genres.



**Note:** The examples below are for reference only. For the latest responses, run new queries using the TMSIds below.

Title	progType	subType	Genres	TMSId	XML Output
Enter the Dragon	Feature Film	Feature Film	Action, Adventure, Martial Arts	MV000105120000	<a href="#">Enter the Dragon</a>
Interstellar	Feature Film	Feature Film	Science fiction, Adventure, Action	MV005492710000	<a href="#">Interstellar</a>
The SpongeBob SquarePants Movie	Feature Film	Feature Film	Animated, Children, Comedy, Adventure	MV001523270000	<a href="#">The SpongeBob SquarePants Movie</a>
The SpongeBob SquarePants	Feature Film	Feature Film	Animated, Children, Comedy,	MV018023230000	<a href="#">The SpongeBob SquarePants Movie</a>

Title	progType	subType	Genres	TMSId	XML Output
Movie(in Korean, lang="ko")			Adventure		
Modern Family	Series	Episode	Holiday, Sitcom	EP011581240208	<a href="#">Modern Family</a>
SpongeBob SquarePants	Series	Episode	Animated, Children, Comedy, Fantasy	EP003077660756	<a href="#">SpongeBob SquarePants</a>
Collector's Call	Series	Series	Reality, Collectibles	SH031787410000	<a href="#">Collector's Call</a>
FIFA World Cup 2022	Series	Series	Soccer	SH040998820000	<a href="#">FIFA World Cup 2022</a>
SpongeBob SquarePants	Series	Series	Animated, Children, Comedy, Fantasy	SH003077660000	<a href="#">SpongeBob SquarePants</a>
SpongeBob Bonus!	Special	Special	Animated, Children, Special	SH007604480000	<a href="#">SpongeBob Bonus!</a>
SpongeBob SquarePants: Halloween	Special	Special	Special, Comedy, Fantasy	SH039623150000	<a href="#">SpongeBob SquarePants: Halloween</a>
Pro Pickleball Association	Sports non-event	Episode		EP038774000001	<a href="#">Pro Pickleball Association</a>
Pro Pickleball Association	Sports non-event	Series		SH038774000000	<a href="#">Pro Pickleball Association</a>
Uncharted Waters With Peter Miller	Sports non-event	Series	Outdoors, Fishing	SH030326510000	<a href="#">Uncharted Waters With Peter Miller</a>

## Product Demonstration Kit (PDK)

The On API Product Demonstration Kit is a sample implementation of the ingestion backend for Gracenote On data delivery API. The purpose of the kit is to speed up the evaluation of GN data delivered via the API and the implementation of customer ingestion systems. The kit currently demonstrates how to work with the API and provides sample parsers and database schema.

The implementation is built using Python, shell scripts, widely available tools such as curl, xmllint, sqlite; it runs natively on Linux and Mac, it also runs on Windows using MSYS2 environment (based on Cygwin).

You can download the PDK here:

- [ON-PDK 1.4.0.1 zip](#)
- [ON-PDK 1.4.0.1 tar.gz](#)

DISCLAIMER: THE PDK IS NOT MEANT TO BE USED AS A PRODUCTION-READY SYSTEM. IT IS MERELY A DEMONSTRATION OF ONE APPROACH (AMONG MANY) TO IMPLEMENT THE INGESTION BACKEND. CLIENTS WILL NEED TO CREATE THEIR OWN CODE AND SYSTEM FOR LIVE PRODUCTION OR OTHER USES.

## Feedback

This short survey contains less than 20 questions and should only take a few minutes of your time. We at Gracenote appreciate and welcome your feedback and will use it to improve the future releases of our Product Demonstration Kits.

[Click here to take the survey.](#)



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# Data Dictionaries and Controlled Vocabulary

## Data Dictionaries

On API provides the following data dictionaries in spreadsheet format. Click on the links below to download these files:

- [On API Data Dictionary Items in CV](#)
- [On API Data Dictionary Items not in CV](#)
- [On API Celebrities Data Dictionary](#)

## Controlled Vocabularies

On API provides a Controlled Vocabulary endpoint that lists Gracenote-managed (controlled) terms to simplify data indexing and searching. The terms may include extended attributes carrying second-level data (such as rating bodies with rating codes), relationships to other lists or translations/localizations.

The following program value lists are enumerated in the Controlled Vocabulary endpoint:

- Genre, Ratings, Awards, Cast/Crew Roles, Countries.

The following program value lists are documented in the [Supplemental Controlled Vocabulary](#) (auto-download):

- Program Types/Subtypes, Title Subtypes, Program Relationships, Release Media.  
The Supplemental Controlled Vocabulary also includes Gracenote Genre descriptions.

## *Data Structure and Relationships*

**XSD:** [http://files.api.gracenote.com/xsd/on\\_update\\_controlledVocabularies\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_controlledVocabularies_3.23.xsd)

Unless stated otherwise, the XPATH in the tables below is relative to:  
on/controlledVocabularies/controlledVocabulary

XPATH Element/Attribute	Description	Example
@cvld	Object id of the CV item, unique across all vocabularies/lists	GNR11, CNTRY10, ADV1018, DMA120, GN0001YFXWJWBWF
@objectType	CV item type, denoting specific vocabulary/list	Genre, Country, RatingAdvisory, Market, VideoDescriptors
id	The id of the CV item as referenced in other endpoints such as Programs or Celebrities. VideoDescriptors are an exception to this and instead contain the descriptor typeld in this field, their cvld being the same as their descriptorld referenced in the other endpoints.	11, 10, 1018, 813, GNFMQH6ZGH1477N
type	Additional detail for CV item, if applicable, for example, "Cast" or "Crew" for roleType	Cast, Crew, Program, Credit
lang	Language code for the value field. Currently defaults to 'en'.	en
value	CV item value (list term) in the specified language	Sitcom, DEU, Action and Rude Humor, San Francisco-Oak-San Jose, Repentance
extendedAttributes/ extendedAttribute/ attributeld	Extended attributes are used for nested values as well as translations. Attributeld can be used for ISO numeric country code (Country CV), rating code (RatingsBody CV).	276, PG-13
extendedAttributes/ extendedAttribute/ attributeType	Describes the category/type of the extended attribute value	translation, code, country
extendedAttributes/	The translation language of the	en, fr-CA, pt-BR, it, de,

XPATH Element/Attribute	Description	Example
extendedAttribute/ attributeLang	extended attribute value, if applicable	ja
extendedAttributes/ extendedAttribute/ attributeValue	The value of the extended attribute. Can carry the translated text, 3-letter country code (Country CV), optional description of the rating code (RatingsBody CV) etc.	Arrependimento, DEU, All ages admitted

### CV Types / Lists

cvType	Ref'd by	Description	Example
RatingAdvisory	Programs	Specific terms or phrases which provide specific detail as to portions of the movie/program that may require viewer discretion	Drug and Alcohol Use, Mature Situations, Coarse Language
RatingsBody	Programs	The name of a rating body or rating system used to classify content, including classification codes. May include official or unofficial bodies.	Motion Picture Association (PG, PG-13, R), USA Parental Rating (TVG, TV14, TVMA)
AwardBody	Programs, Celebrities	The name of an award body that selects nominees and winners of their respective award categories	Academy Award, Screen Actors Guild Awards
AwardType	Programs, Celebrities	The category of the award a person or program could be nominated for or win	Best Actress, Film Editing

cvType	Ref'd by	Description	Example
AwardCategory Mapping	Programs, Celebrities	A mapping that associates the award body with the award category name	Academy award → Actor in a leading role
Country	Programs, Celebrities, Sources, Lineups, Schedules	3-letter ISO code for country	DEU, IND
GenreImageMap	N/A, default images for programs with a given genre	Mapping between genrelid to the genre images, including URI to collect those images from Media Cloud	genrelid = 1 (Action) → assets/g1_v9_ab.jpg
GenreImage	N/A, default images for programs with a given genre	The genre image asset information which includes aspect ratio, height and width	g1_v9_ab: ratio=3:4, width=1080, height=1440
Genre	Programs, Organizations	A category that describes the overall artistic content of a program, including language localizations	Action, Comedy, Horror
Holiday	Programs	Specific holidays playing a significant role in the plot/subject of a program	Christmas, Anzac Day, Halloween
Market	Sources, Lineups	A designated market area (DMA), also referred to as a media market, is a region of the United States that is used to define television and radio markets - usually metropolitan areas, with suburbs often being combined within	Cleveland-Akron, New York, Buffalo
RoleType	Programs, Celebrities	Responsibility of the person in a program/production	Actor, Host, Animation Manager

cvType	Ref'd by	Description	Example
VideoDescriptors	Video Descriptors, Programs, Program Annotations	Video Descriptor taxonomy language localizations	Power (en) ↔ Poder (pt-BR)
Warning	Programs	Content warnings from a legacy content advisory system that predates support of rating bodies in Gracenote data	Adult Language, Violence

### *Localizations/Translations*

Translations are available via CV extendedAttributes for the following CV types:

- Genre, Holiday, RoleType, [Advanced Discovery Endpoints \(page 165\)](#), Warning

### *Vocabularies Outside of CV*

Controlled Vocabulary endpoint includes larger and/or dynamic lists that are updated more frequently. The following mostly static lists/vocabularies are provided in the [Supplemental Controlled Vocabulary](#) (auto-download) document (each line item is a separate tab):

Endpoint	List / Vocabulary
Programs	progTypes, subTypes title_subTypes, Relationships, Release Medium, Genres (incl. descriptions and movie/sport flags)
Sources	Types, Relationships, Attributes, Reach, Channel Transports
Lineups	Types, Device Types, Channel Tiers, Channel Transports
Schedule	Qualifiers
Availability	Id Type, URL, License, VideoQuality, Provider Data

### *API and Example Responses*

**API:** [http://on-api.gracenote.com/v3/cv?updateId=0&limit=1000&api\\_key=<your-api-key>](http://on-api.gracenote.com/v3/cv?updateId=0&limit=1000&api_key=<your-api-key>)

### [Controlled Vocabulary XML examples](#)

## Schema 3.24

The On API schemas define the structure of the endpoint responses. Schemas are represented as XML schema files (xsds).

- [Schema Docs \(HTML\)](#)

## XML Schema Files (xsds)

To download the xsds as a batch, click here: [xsds.zip](#).

To download the xsds individually, use these links:

- [http://files.api.gracenote.com/xsd/on\\_update\\_celebrities\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_celebrities_3.23.xsd)
- [http://files.api.gracenote.com/xsd/on\\_update\\_controlledVocabularies\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_controlledVocabularies_3.23.xsd)
- [http://files.api.gracenote.com/xsd/on\\_update\\_lineups\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_lineups_3.23.xsd)
- [http://files.api.gracenote.com/xsd/on\\_update\\_organizations\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_organizations_3.23.xsd)
- [http://files.api.gracenote.com/xsd/on\\_update\\_programAnnotations\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_programAnnotations_3.23.xsd)
- [http://files.api.gracenote.com/xsd/on\\_update\\_programAvailabilities\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_programAvailabilities_3.23.xsd)
- [http://files.api.gracenote.com/xsd/on\\_update\\_programmappings\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_programmappings_3.23.xsd)
- [http://files.api.gracenote.com/xsd/on\\_update\\_programs\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_programs_3.23.xsd)
- [http://files.api.gracenote.com/xsd/on\\_update\\_schedules\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_schedules_3.23.xsd)
- [http://files.api.gracenote.com/xsd/on\\_update\\_source\\_programs\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_source_programs_3.23.xsd)
- [http://files.api.gracenote.com/xsd/on\\_update\\_sources\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_sources_3.23.xsd)
- [http://files.api.gracenote.com/xsd/on\\_update\\_sports\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_sports_3.23.xsd)
- [http://files.api.gracenote.com/xsd/on\\_update\\_sports\\_events\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_sports_events_3.23.xsd)
- [http://files.api.gracenote.com/xsd/on\\_update\\_teams\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_teams_3.23.xsd)
- [http://files.api.gracenote.com/xsd/on\\_update\\_universities\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_universities_3.23.xsd)
- [http://files.api.gracenote.com/xsd/on\\_update\\_venues\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_venues_3.23.xsd)
- [http://files.api.gracenote.com/xsd/on\\_update\\_videoDescriptorsTaxonomy\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_videoDescriptorsTaxonomy_3.23.xsd)
- [http://files.api.gracenote.com/xsd/on\\_update\\_videoPopularities\\_3.23.xsd](http://files.api.gracenote.com/xsd/on_update_videoPopularities_3.23.xsd)
- [http://files.api.gracenote.com/xsd/types\\_3.23.xsd](http://files.api.gracenote.com/xsd/types_3.23.xsd)



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# Glossary

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## A

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### **Alternate Season/Episode**

Season and Episode number as provided by a non-originating source that is currently airing the episode. This information is typically received by Gracenote editors as part of an airing schedule.

## C

---

### **Celebrities**

Detailed personal information for celebrities

### **Countrywide**

An indicator placed on the episode which indicates that the season/episode number applies to all channels airing the episode within the country specified.

### **Crossover**

Storyline begins in an episode of one TV Series and is carried over to episode(s) of another TV Series ("CSI" crossover to "Without a Trace"; "Law and Order" crossover to Law and Order: SVU"; "Private Practice" crossover to "Grey's Anatomy")

## E

---

### **Episode**

One part of a of a parent series show. Episode data can be represented with numbers (10), as well as, letters (A).

---

## F

---

### Franchise

A group of programs using the same “brand” but each with different casts and storylines. Also a new series with a similar theme and existing in the same universe as the original series, but may not necessarily have the same characters. Examples of this type are the Star Trek, Stargate, Law and Order, and CSI series. Also a series that has been edited to re-air with a shorter duration (may or may not have a different title). A Franchise link is used for remakes and/or series revivals. Franchise can also relate a to a movie TV series, i.e. “M\*A\*S\*H” (1970 theatrical movie) to “M\*A\*S\*H (1972 CBS-TV series) or “The X-Files” (1993 TV series) to “The X-Files” (1998 theatrical movie.)

---

## L

---

### Lineups

Listings of available channel/stations, by geographic area and provider.

---

## M

---

### Movies

Theatrical-release and made-for-TV movies.

---

## P

---

### Primary Season/Episode

Season and Episode number as provided by the original source at the time the program episode was created in the Gracenote programs database.

### Programs

Individual programs (TV shows, movies, sports events).

---

## R

---

### **Remake**

A remake link is used when a motion picture covering a particular subject matter is produced again with the same narrative and subject matter. A remake may sometimes have a different title

### **rootId**

The TMS rootId is the universal ID for the program record of a TV show, TV episode, movie (theatrical or made-for-television) and sports event. It is universal for all program records with different title language/description and language work version. This ID domain is unique.

---

## S

---

### **Season**

A collection of episodes belonging to a parent series show. Season data is always represented with a number, however, the number can also be preceded by the word Season (Season 6) or simply contain a calendar year (2013).

### **Series**

Serialized programs (episodic TV shows, miniseries, talk shows).

### **Series Special**

A stand-alone program (usually a reunion, recap, etc.) that is directly related to an existing or former TV series. Also a show that reunites cast after a series has ended to take a retrospective look at the original series.

### **seriesId**

This numeric ID is equivalent to the rootId of series' parent program record. Only TV series programs (SH header record and EP episode records) will include seriesId.

---

## **Source**

The entity by which program and schedule information has been provided to Gracenote.

## **Spin-off**

A spinoff link is used when one or more supporting characters in an existing series are given their own show in which they become the main focus. The original series continues without them. There may be crossover of characters between the shows on occasion (such as Angel from Buffy The Vampire Slayer, Flo from Alice, The Ropers from Three's Company, Daria from Beavis and Butt-head). The spinoff link is used when new characters are specially incorporated into an existing series for the sole purpose of being launched into their own show that will feature no regular characters from the original series, except as guest appearances (such as Empty Nest from The Golden Girls; Melrose Place from Beverly Hills, 90210, etc.). Also when regular characters from a series continue in their own series after the original series ends (such as George and Mildred and Robin's Nest from Man About the House; Frasier from Cheers; Joey from Friends). This is usually done with the same actors, though not always (such as Trapper John, M.D.).

## **Sports**

Program information specific to sports genre.

## **Stations**

TV stations and related channels available in a lineup.

## **Super Series**

Network, cable or syndicated programs that are basically the same show with slightly different titles. Ex: Survivor; Survivor Africa

---

## T

---

### **TMSId**

Unique ID for a program (show, movie, sports). This ID is a 14-character alphanumeric field; it is the primary key of the program record, and is used to relate the program to TV schedules and Movie Showtimes. It is specific to a program's title, description language, and version. The tmsId is the industry's gold standard for recognizing and synchronizing entertainment assets. The first two letters of the tmsId indicate entity type: SH:Show - TV specials, one-time shows, and series (non-episode-specific information), EP:Episode - TV show episodes; metadata includes season number, episode number, and episode title; relates back to parent using a seriesId, MV:Movie - includes both theatrical releases and made-for-television films.

### **Topic**

A topic link is used when movies dealing with the same specific topic, as opposed to genre. An example of a topic would be all shows or movies related to "John F. Kennedy".

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## Glossary

---

### A

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Season and Episode number as provided by a non-originating source that is currently airing the episode. This information is typically received by Gracenote editors as part of an airing schedule.

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Detailed personal information for celebrities

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