

Video ID Web API Reference

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Table of Contents

Overview	3
Requirements	3
Video Disc Set Retrieval	
VIDEODISCSET_TOC	3
VIDEODISCSET_FETCH	5
General Video Disc Set Response	6

Overview

This document describes how to use the Gracenote Video ID web API to identify, retrieve, and navigate video disc content from the online Gracenote Media Recognition Service.

Requirements

To use Video ID queries, you will need to also use the *Gracenote Thin Client*. The Thin Client generates video disc Table of Contents (TOC). You can get the Thin Client package from Gracenote Professional Services.

Video Disc Set Retrieval

The queries and responses described in this section are used to retrieve metadata for video disc set products:

- VIDEODISCSET_TOC looks up video disc sets based on a table of contents (TOC) read from a video disc (DVD or Blu-ray) in a physical disc drive.
- VIDEODISCSET_FETCH retrieves metadata for a video disc set designated by its Gracenote identifier.

VIDEODISCSET_TOC

The VIDEODISCSET_TOC query looks up and returns metadata for video disc set products, based on a table of contents (TOC) read from a video disc (DVD or Blu-ray) in a physical disc drive.

Parameters	Description
MODE	Optional. If set to SINGLE_BEST, the query will return at most one response, representing the single best available match to the specified TOC. If this element is omitted, multiple matching responses may be returned, ordered by the ORD attribute. The application can then present these to the user for interactive match resolution, followed by a VIDEODISCSET_FETCH query to retrieve metadata for the single selected match.
TOC	Required. Specifies the TOC to look up. The child element, <data>, contains escaped (entity-encoded) XML defining the TOC in Gracenote Thin Client Format, with the actual TOC data given by the <title_unit_array> element. The following example shows the contents of the <data> element with XML character escapes replaced with their natural character equivalents for readability.</data></title_unit_array></data>
XID	Optional. Can be used to specify a third party data source to help with the identification process; consult your Gracenote Professional Services representative for more information about supported TOC formats and ID types.

SELECT_EXTENDED Options

The SELECT EXTENDED option requests additional metadata.

Options	Description
COVERART	URL information for retrieving the disc set's cover art image

In SINGLE_BEST mode only, the VIDEODISCSET_TOC query also supports the following types of extended data:

Options	Description
AV_WORK	Descriptive information on audio-visual works associated with the disc set product
AV_WORK_IMAGE	URL information for retrieving images associated with the associated works
CONTRIBUTOR_IMAGE	URL information for retrieving images associated with the works' contributors
LINK	Commercial purchase information for the disc set product

Example Query

The following example shows requests for all of these extended data types. In practice, client applications can conserve bandwidth and improve performance by omitting unneeded ones from the SELECT_EXTENDED option or by omitting the option entirely.

```
<QUERIES>
 <AUTH>
   <CLIENT>client_id_string</CLIENT>
   <USER>user_id_string</USER>
 <LANG>GER</LANG>
 <QUERY CMD="VIDEODISCSET_TOC">
   <MODE>SINGLE_BEST</MODE>
     <DATA>an_escaped_xml_data_block</DATA>
   </TOC>
   <OPTION>
     <PARAMETER>SELECT_EXTENDED</PARAMETER>
     <VALUE>AV_WORK, AV_WORK_IMAGE</VALUE>
   </OPTION>
   <XID DATASOURCE="gracenote" DATATYPE="aacs-ccid">00020009D4</XID>
 </QUERY>
</QUERIES>
```

Example of video TOC content



A Important

The TOC must be in escaped (entity-encoded) XML format. You must replace the following entities with their equivalent characters:

Entity	Escaped Entity
"	"
1	'
<	<
>	>
&	&

```
<DATA>
<?xml version=&quot;1.0&quot; encoding=&quot;UTF-8&quot; ?&gt;
<DVD_THIN_TOC VER=&quot;1&quot; ANGLED=&quot;FALSE&quot;&gt;
 <VIDEO_TS&gt;
   <REGION&gt;C0&lt;/REGION&gt;
   <VTS_ATTR CNT=&quot;2&quot;&gt;
     <VTS N=&quot;1&quot;&gt;
       < VIDEO_ATTR&gt;
         <COMPRESSION_MODE TYPE=&quot;1&quot;&gt;&lt;/COMPRESSION_MODE&gt;
         <TV_SYSTEM TYPE=&quot;0&quot;&gt;&lt;/TV_SYSTEM&gt;
         <ASPECT_RATIO TYPE=&quot;0&quot;&qt;&lt;/ASPECT_RATIO&qt;
         <DISP_MODE TYPE=&quot;3&quot;&gt;&lt;/DISP_MODE&gt;
         <CC_FIELD1 TYPE=&quot;0&quot;&gt;&lt;/CC_FIELD1&gt;
         <CC_FIELD2 TYPE=&quot;0&quot;&gt;&lt;/CC_FIELD2&gt;
         <SRC_PIC_RESOLUTION TYPE=&quot;0&quot;&gt;&lt;/SRC_PIC_RESOLUTION&gt;
         <SRC_PIC_LETTERBOXED TYPE=&quot;0&quot;&gt;&lt;/SRC_PIC_LETTERBOXED&gt;
         <FILM_CAMERA_MODE TYPE=&quot;0&quot;&gt;&lt;/FILM_CAMERA_MODE&gt;
       </VIDEO_ATTR&gt;
       <TITLE_UNIT_ARRAY CNT=&quot;1&quot;&gt;
         <TITLE_UNIT N=&quot;1&quot; CNT=&quot;1&quot;&gt;300&lt;/TITLE_UNIT&gt;
       </TITLE_UNIT_ARRAY&gt;
     </VTS&gt;
     <VTS N=&quot;2&quot;&gt;
       < VIDEO_ATTR&gt;
         <COMPRESSION_MODE TYPE=&quot;1&quot;&gt;&lt;/COMPRESSION_MODE&gt;
         <TV_SYSTEM TYPE=&quot;0&quot;&gt;&lt;/TV_SYSTEM&gt;
         <ASPECT_RATIO TYPE=&quot;0&quot;&gt;&lt;/ASPECT_RATIO&gt;
         <DISP_MODE TYPE=&quot;3&quot;&gt;&lt;/DISP_MODE&gt;
         <CC_FIELD1 TYPE=&quot;0&quot;&gt;&lt;/CC_FIELD1&gt;
         <CC_FIELD2 TYPE=&quot;0&quot;&gt;&lt;/CC_FIELD2&gt;
         <SRC_PIC_RESOLUTION TYPE=&quot;0&quot;&gt;&lt;/SRC_PIC_RESOLUTION&gt;
         <SRC_PIC_LETTERBOXED TYPE=&quot;0&quot;&gt;&lt;/SRC_PIC_LETTERBOXED&gt;
         <FILM_CAMERA_MODE TYPE=&quot;0&quot;&gt;&lt;/FILM_CAMERA_MODE&gt;
       </VIDEO_ATTR&gt;
       <TITLE_UNIT_ARRAY CNT=&quot;1&quot;&gt;
         <TITLE_UNIT N=&quot;1&quot; CNT=&quot;23&quot;&gt;6015 6607 13886 2002 11193
            30210 5865 7806 8415 7965 14595 15746 9285 13571 6094 7811 12509 6911 13148
            13908 4695 13099 2733</TITLE_UNIT&gt;
       </TITLE_UNIT_ARRAY&gt;
     </VTS&gt;
   </VTS_ATTR&gt;
  </VIDEO TS&qt;
</DVD_THIN_TOC&gt;
</DATA>
```

VIDEODISCSET FETCH

The VIDEODISCSET_FETCH query returns metadata for a video disc set product designated by its Gracenote identifier. This is useful for navigating to the disc set from another associated entity (such as a work or a contributor) that has included its Gracenote identifier as part of another query response.

Parameters	Description
GN_ID	Required. The Gracenote identifier of the disc set to retrieve.
OPTION	Optional. Options modifying the behavior of the query. For the VIDEODISCSET_FETCH query, the only PARAMETER value supported is SELECT_EXTENDED; the available extended data types are the same as for the VIDEODISCSET_TOC query in SINGLE_BEST mode.

SELECT_EXTENDED Options

The SELECT_EXTENDED option requests additional metadata.

Options	Description
COVERART	URL information for retrieving the disc set's cover art image
AV_WORK	Descriptive information on audio-visual works associated with the disc set product
AV_WORK_IMAGE	URL information for retrieving images associated with the associated works
CONTRIBUTOR_IMAGE	URL information for retrieving images associated with the works' contributors
LINK	Commercial purchase information for the disc set product

Example Query

The following example shows requests for all of these extended data types. In practice, client applications can conserve bandwidth and improve performance by omitting unneeded ones from the SELECT_EXTENDED option or by omitting the option entirely.

General Video Disc Set Response

When a VIDEODISCSET_TOC or VIDEODISCSET_FETCH query succeeds in finding a match to the specified video TOC or Gracenote identifier, it will return a response with the STATUS attribute OK and a <VIDEODISCSET> child element containing metadata for the matched video disc set. If no match satisfying the query is found, the <RESPONSE> element will be empty with a STATUS attribute of NO_MATCH. If the query fails because of an error, the STATUS attribute will be ERROR and a <MESSAGE> element will be included describing the nature of the error.



If a VIDEODISCSET_TOC query does not specify SINGLE_BEST mode, a successful response may contain more than one <VIDEODISCSET> element, ordered by an ORD attribute. The only extended data type available for a VIDEODISCSET_TOC query in this case is COVERART.

Example Response

```
<RESPONSE STATUS="OK"
 <VIDEODISCSET>
   <GN_ID>a_gracenote_id</GN_ID>
   <TITLE>The Dark Knight</TITLE>
   <DATE TYPE="RELEASE">2008-12-09</pate>
   <DURATION UNITS="SEC">9180</DURATION>
     <SYSTEM>MPAA</SYSTEM>
     <CODE>PG-13</CODE>
     <REASON>Intense Sequences of Violence and Some Menace/REASON>
   <ASPECT_RATIO TYPE="ANAMORPHIC">2.35:1</ASPECT_RATIO>
   <MATCHED_DISC_NUM>1</MATCHED_DISC_NUM>
     <DISC_NUM>1</DISC_NUM>
     <GN_ID>a_gracenote_id</GN_ID>
     <SIDE>
       <SIDE_NUM>1</SIDE_NUM>
       <LAYER>
         <LAYER_NUM>1</LAYER_NUM>
         <VIDEO>
           <FEATURE></FEATURE>
         </VIDEO>
       </LAYER>
      </SIDE>
   </DISC>
   <DISC>
      <DISC_NUM>2</DISC_NUM>
     <GN_ID>a_gracenote_id</GN_ID>
     <TITLE>Special Features</TITLE>
   </DISC>
   <\!-\- Following element included only if query
   <\!-\- specifies the SELECT_EXTENDED option COVERART -->
   <URL TYPE="COVERART" SIZE="MEDIUM">a_temporary_url/URL>
   <\!-\- Following element included only if query -->
    <\!-\- specifies the SELECT_EXTENDED option LINK -->
   <XID DATASOURCE="merchant1">aba84154825AE</XID>
   <XID DATASOURCE="merchant2">45730362584394436192586</XID>
  </VIDEODISCSET>
</RESPONSE>
```

At the top level, the <VIDEODISCSET> element contains metadata elements describing the disc set product as a whole, such as (in the example) its Gracenote identifier, title, release date, duration, rating, and aspect ratio. If the original query requested the SELECT_EXTENDED options COVERART and LINK, cover art and commercial link data are included (if available) in the form of <URL> and <XID> ("external identifier") elements, respectively.

The remainder of the <VIDEODISCSET> element embodies the nested structural hierarchy common to all disc-based (DVD or Blu-ray) video products:

```
Disc set
    Disc
        Side
            Layer
                 Feature
```

There is a separate <DISC> element for each disc in the set. Note, however, that full metadata is provided only for the single disc actually matched by the query (identified by <MATCHED_DISC_NUM>); other discs in the set return only minimal identifying information.

Video discs are always part of a disc set. A video product consisting of only a single disc is represented by a <VIDEODISCSET> element containing one <DISC> element.

Aside from top-level metadata about the disc set, most of the interesting information is returned at the feature level. There is a separate <FEATURE> element for each video feature (such as a movie, TV episode, or special feature), listed in order of their feature numbers (<FEATURE_NUM>) as they appear on the disc.

In the case of a movie disc, if the SELECT_EXTENDED option AV_WORK has been specified, the main <FEATURE> element representing the movie itself (<FEATURE_TYPE> = Main) will contain a child <AV WORK> element containing the movie's metadata. If AV WORK extended data has not been requested, the movie metadata will be provided directly at the <FEATURE> level instead. The <URL> elements for work and contributor images will be included only if the original query specified the SELECT_EXTENDED options AV WORK IMAGE and CONTRIBUTOR IMAGE, respectively.



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The replacement of feature-level metadata at the <AV_WORK> level applies only to features of type MAIN. For other feature types (such as a TV episode), the metadata is supplied at the <FEATURE> level and the <AV_WORK> element, if present, contains only minimal identifying information.

Example Feature element for a main feature

```
<FEATURE>
 <FEATURE_NUM>1</FEATURE_NUM>
 <FEATURE_TYPE ID="1">Main/FEATURE_TYPE>
 <TITLE>The Dark Knight</TITLE>
 <\!-\- Following element included only if query
 <!-\- specifies the SELECT_EXTENDED option AV_WORK \-->
 <AV_WORK>
   <GN_ID>a_gracenote_id</GN_ID>
   <TITLE>The Dark Knight</TITLE>
   <DATE TYPE="ORIGINALRELEASE">2008</DATE>
   <DURATION UNITS="SEC">86820</DURATION>
     <SYSTEM>MPAA</SYSTEM>
     <CODE>PG-13</CODE>
     <REASON>Intense sequences of violence and some menace</REASON>
   <\!-\- ...Further ratings clipped... \-->
    <PRODUCTION_TYPE ID="16635">Motion Picture/PRODUCTION_TYPE>
    <GENRE RANK="1" ID="33507">Action</GENRE>
   <GENRE RANK="5" ID="33515">Superhero</GENRE>
   <GENRE RANK="3" ID="33598">Drama</GENRE>
   <GENRE RANK="2" ID="33657">Crime</GENRE>
   <GENRE RANK="4" ID="33664">Thriller</GENRE>
   <TITLE>Batman</TITLE>
   <SYNOPSIS>a_synopsis</SYNOPSIS>
    <CONTRIBUTOR RANK="1">
      <NAME>Christian Bale</NAME>
     <GN_ID>a_gracenote_id</GN_ID>
     <\!-\- Following element included only if query specifies the \-->
      <\!-\- SELECT_EXTENDED options AV_WORK and CONTRIBUTOR_IMAGE \-->
     <URL TYPE="IMAGE" SIZE="MEDIUM">a_temporary_url
      <CONTRIBUTION>
      <CONTRIBUTION_TYPE ID="a_gracenote_id">Actor</CONTRIBUTION_TYPE>
      <CHARACTER>Bruce Wayne/Batman</CHARACTER>
   </CONTRIBUTION>
    </CONTRIBUTOR>
   <CONTRIBUTOR RANK="2">
     <NAME>Michael Caine</NAME>
   </CONTRIBITOR>
    <\!-\- ...Further contributors clipped... \-->
   <\!-\- Following element included only if query specifies \-->
   <\!-\- the SELECT_EXTENDED options AV_WORK and AV_WORK_IMAGE \-->
   <URL TYPE="IMAGE" SIZE="MEDIUM">a_temporary_url
  </AV_WORK>
</FEATURE>
```

Example of Feature element for a TV episode

```
<FEATURE>
 <FEATURE_NUM>5</FEATURE_NUM>
 <FEATURE_TYPE ID="2">Episode/FEATURE_TYPE>
 <TITLE>The Aftermath</TITLE>
 <DURATION UNITS="SEC">1277</DURATION>
 <GENRE RANK="1" ID="33548">Comedy Series
 <PRODUCTION_TYPE ID="16641">TV Series/PRODUCTION_TYPE>
 <SYNOPSIS>a_synopsis</SYNOPSIS>
 <CONTRIBUTOR RANK="1">
   <NAME>Tina Fey</NAME>
   <CONTRIBUTION>
     <CONTRIBUTION_TYPE ID="a_gracenote_id">Actor</CONTRIBUTION_TYPE>
     <CHARACTER>Liz Lemon</CHARACTER>
   </CONTRIBUTION>
  </CONTRIBUTOR>
 <CONTRIBUTOR RANK="2">
   <NAME>Alec Baldwin</NAME>
   <CONTRIBUTION>
      <CONTRIBUTION_TYPE ID="a_gracenote_id">Actor</CONTRIBUTION_TYPE>
     <CHARACTER>Jack Donaghy</CHARACTER>
   </CONTRIBUTION>
 </CONTRIBUTOR>
  <CONTRIBUTOR RANK="3">
   <NAME>Tracy Morgan</NAME>
   <CONTRIBUTION>
     <CONTRIBUTION_TYPE ID="a_gracenote_id">Actor</CONTRIBUTION_TYPE>
      <CHARACTER>Tracy Jordan</CHARACTER>
   </CONTRIBUTION>
 </CONTRIBUTOR>
  <AV_WORK>
   <GN_ID>a_gracenote_id</GN_ID>
 </AV_WORK>
</FEATURE>
```