# 

The YouTube Data API lets you incorporate functions normally executed on the YouTube website into your own website or application. The lists below identify the different types of resources that you can retrieve using the API. The API also supports methods to insert, update, or delete many of these resources.

This reference guide explains how to use the API to perform all of these operations. The guide is organized by resource type. A resource represents a type of item that comprises part of the YouTube experience, such as a video, a playlist, or a subscription. For each resource type, the guide lists one or more data representations, and resources are represented as JSON objects. The guide also lists one or more supported methods (LIST, POST, DELETE, etc.) for each resource type and explains how to use those methods in your application.

# Calling the API

The following requirements apply to YouTube Data API requests:

- 1. Every request must either specify an API key (with the key parameter) or provide an OAuth 2.0 token. Your API key is available in the <u>Developer Console's</u> (https://console.developers.google.com/) **API Access** pane for your project.
- 2. You **must** send an authorization token for every insert, update, and delete request. You must also send an authorization token for any request that retrieves the authenticated user's private data.
  - In addition, some API methods for retrieving resources may support parameters that require authorization or may contain additional metadata when requests are authorized. For example, a request to retrieve a user's uploaded videos may also contain private videos if the request is authorized by that specific user.
- 3. The API supports the OAuth 2.0 authentication protocol. You can provide an OAuth 2.0 token in either of the following ways:
  - Use the access\_token query parameter like this: ?access\_token=oauth2token
  - Use the HTTP Authorization header like this: Authorization: Bearer oauth2-token

Complete instructions for implementing OAuth 2.0 authentication in your application can be found in the <u>authentication guide</u> (/youtube/v3/guides/authentication).

# Resource types

### **Activities**

An activity resource contains information about an action that a particular channel, or user, has taken on YouTube. The actions reported in activity feeds include rating a video, sharing a video, marking a video as a favorite, uploading a video, and so forth. Each activity resource identifies the type of action, the channel associated with the action, and the resource(s) associated with the action, such as the video that was rated or uploaded.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/activities#resource) and list of <u>properties</u> (/youtube/v3/docs/activities#properties).

Method	HTTP request	Description
URIs relative to https://www.goo	ogleapis.d	com/youtube/v3
list (/youtube/v3/docs/activities/list)	GET / activiti	Returns a list of channel activity events that match esthe request criteria. For example, you can retrieve events associated with a particular channel or with the user's own channel.
insert (/youtube/v3/docs/activities/inser	POST / t)activiti	Note: This method has been deprecated and is no eslonger supported.

# Captions

A **caption** resource represents a YouTube caption track. A caption track is associated with exactly one YouTube video.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/captions#resource) and list of <u>properties</u> (/youtube/v3/docs/captions#properties).

Method	HTTP request	Description

Method	HTTP request	Description
URIs relative to https://www.google	apis.com/	youtube/v3
delete (/youtube/v3/docs/captions/delete)	DELETE / captions	Deletes the specified caption track.
download (/youtube/v3/docs/captions/download	GET / )captions, <i>id</i>	Downloads a caption track. The caption track is returned in its original format unless the request specifies a value for the tfmt parameter and in its original language unless the request specifies a value for the tlang parameter.
insert (/youtube/v3/docs/captions/insert)	POST / captions	Uploads a caption track.
list (/youtube/v3/docs/captions/list)		Returns a list of caption tracks that are associated with a specified video. Note that the API response does not contain the actual captions and that the <a href="mailto:captions.download">captions.download</a> (/youtube/v3/docs/captions/download) method provides the ability to retrieve a caption track.
update (/youtube/v3/docs/captions/update)	PUT / captions	Updates a caption track. When updating a caption track, you can change the track's <u>draft status</u> (/youtube/v3/docs/captions#snippet.isDraft), upload a new caption file for the track, or both.

### ChannelBanners

A channelBanner resource contains the URL that you would use to set a newly uploaded image as the banner image for a channel.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/channelBanners#resource) and list of <u>properties</u> (/youtube/v3/docs/channelBanners#properties).

Method	HTTP request	Description
URIs relative to https://www.googleap	ois.com/youtube/	v3

Method	HTTP request	Description
<u>insert</u> (/youtube/v3/docs/channelBa	POST / nnners/insert)channe1Banner	Uploads a channel banner image to Yours / first two steps in a three-step process to
	insert	channel:
		1. Call the <b>channelBanners.insert</b> data to YouTube. The image must have 2048x1152 pixels. We recommend up
		<ol><li>Extract the url property's value from for step 1.</li></ol>
		3. Call the <u>channels.update</u> (/youtuk method to update the channel's brance <u>brandingSettings.image.bannels</u> (/youtube/v3/docs/channels#brandi property's value to the URL obtained i

### ChannelSections

A **channelSection** resource contains information about a set of videos that a channel has chosen to feature. For example, a section could feature a channel's latest uploads, most popular uploads, or videos from one or more playlists.

Note that a channel's sections are only visible if the channel displays content in a browse view (rather than a feed view). To enable a channel to display content in a browse view, set the <u>brandingSettings.channel.showBrowseView</u>

(/youtube/v3/docs/channels#brandingSettings.channel.showBrowseView) property to true for the specified channel.

A channel can create a maximum of 10 shelves.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/channelSections#resource) and list of <u>properties</u> (/youtube/v3/docs/channelSections#properties).

Method	HTTP request	Description
URIs relative to https://www.googl	eapis.com/youtube	e/v3
<u>delete</u>	DELETE /	Deletes a channel section.
(/youtube/v3/docs/channelSections/c	delete) channelSecti	ions

Method	HTTP request	Description
<u>insert</u> (/youtube/v3/docs/channelSections/insert)	POST / channelSections	Adds a channel section to the authenticated user's channel. A channel can create a maximum of 10 shelves.
list (/youtube/v3/docs/channelSections/list)	GET / channelSections	Returns a list of <b>channelSection</b> sresources that match the API request criteria.
update (/youtube/v3/docs/channelSections/update	PUT / )channelSections	Updates a channel section.

### Channels

A channel resource contains information about a YouTube channel.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/channels#resource) and list of <u>properties</u> (/youtube/v3/docs/channels#properties).

Method	HTTP request	Description
URIs relative to https://www.goog	gleapis.c	com/youtube/v3
list (/youtube/v3/docs/channels/list)	GET / channel	Returns a collection of zero or more <b>channel</b> sresources that match the request criteria.
update (/youtube/v3/docs/channels/update	PUT / e)channel	Updates a channel's metadata. Note that this method scurrently only supports updates to the channel resource's brandingSettings and invideoPromotion objects and their child properties.

### CommentThreads

A **commentThread** resource contains information about a YouTube comment thread, which comprises a top-level comment and replies, if any exist, to that comment. A **commentThread** resource can represent comments about either a video or a channel.

Both the top-level comment and the replies are actually <u>comment</u> (/youtube/v3/docs/comments) resources nested inside the <u>commentThread</u> resource. The

commentThread resource does not necessarily contain all replies to a comment, and you need to use the <a href="mailto:comments.list">comments.list</a> (/youtube/v3/docs/comments/list) method if you want to retrieve all replies for a particular comment. Also note that some comments do not have replies.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/commentThreads#resource) and list of <u>properties</u> (/youtube/v3/docs/commentThreads#properties).

Method	HTTP request	Description
URIs relative to https://www.googleapis	.com/youtube/v	/3
list (/youtube/v3/docs/commentThreads/list)	GET / commentThread	Returns a list of comment threads that dsmatch the API request parameters.
<u>insert</u> (/youtube/v3/docs/commentThreads/insert)	POST / commentThread	Creates a new top-level comment. To disadd a reply to an existing comment, use the <u>comments.insert</u> (/youtube/v3/docs/comments/insert) method instead.
update (/youtube/v3/docs/commentThreads/update	PUT / e)commentThread	Modifies the top-level comment in a dscomment thread.

#### Comments

A **comment** resource contains information about a single YouTube comment. A comment resource can represent a comment about either a video or a channel. In addition, the comment could be a top-level comment or a reply to a top-level comment.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/comments#resource) and list of <u>properties</u> (/youtube/v3/docs/comments#properties).

Method	HTTP request	Description
URIs relative to https://www.googleapis.com/	youtube/v3	
list (/youtube/v3/docs/comments/list)	GET /comments	Returns a list of commen API request parameters.

Method	HTTP request	Description
setModerationStatus (/youtube/v3/docs/comments/setModerationStatu	POST /comments/ s)setModerationStatu	Sets the moderation statuscomments. The API requauthorized by the owner ovideo associated with the
<u>insert</u> (/youtube/v3/docs/comments/insert)	POST /comments	Creates a reply to an exis  Note: To create a top-leve  commentThreads.inse  (/youtube/v3/docs/commethod.
markAsSpam (/youtube/v3/docs/comments/markAsSpam)	POST /comments/ markAsSpam	Expresses the caller's opi more comments should t
<u>delete</u> (/youtube/v3/docs/comments/delete)	DELETE /comments	Deletes a comment.
update (/youtube/v3/docs/comments/update)	PUT /comments	Modifies a comment.

## GuideCategories

A **guideCategory** resource identifies a category that YouTube algorithmically assigns based on a channel's content or other indicators, such as the channel's popularity. The list is similar to <u>video categories</u> (/youtube/v3/docs/videoCategories), with the difference being that a video's uploader can assign a video category but only YouTube can assign a channel category.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/guideCategories#resource) and list of <u>properties</u> (/youtube/v3/docs/guideCategories#properties).

Method	HTTP request	Description			
URIs relative to https://www.googleapis.com/youtube/v3					
list GET / Returns a list of categories that can be (/youtube/v3/docs/guideCategories/list) guideCategories associated with YouTube channels.					
(/youtube/v3/docs/guideCa	ategories/iist/guideCategori	es associated with YouTube channels.			

## I18nLanguages

An **i18nLanguage** resource identifies an application language that the YouTube website supports. The application language can also be referred to as a UI language. For the

YouTube website, an application language could be automatically selected based on Google Account settings, browser language, or IP location. A user could also manually select the desired UI language from the YouTube site footer.

Each i18nLanguage resource identifies a language code and a name. The language code can be used as the value of the h1 parameter when calling API methods like videoCategories.list and guideCategories.list.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/i18nLanguages#resource) and list of <u>properties</u> (/youtube/v3/docs/i18nLanguages#properties).

Method	HTTP request	Description	
URIs relative to https://www	.googleapis.com/you	tube/v3	
<u>list</u> GET / Returns a list of application languages that			
(/youtube/v3/docs/i18nLangu	ages/list) <b>i18nLanguag</b> e	esthe YouTube website supports.	

# I18nRegions

An **i18nRegion** resource identifies a geographic area that a YouTube user can select as the preferred content region. The content region can also be referred to as a content locale. For the YouTube website, a content region could be automatically selected based on heuristics like the YouTube domain or the user's IP location. A user could also manually select the desired content region from the YouTube site footer.

Each i18nRegion resource identifies a region code and a name. The region code can be used as the value of the regionCode parameter when calling API methods like search.list, videos.list, activities.list, and videoCategories.list.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/i18nRegions#resource) and list of <u>properties</u> (/youtube/v3/docs/i18nRegions#properties).

Method	HTTP reques	Description
URIs relative to https://www.go	oogleapis.com	/youtube/v3
list (/youtube/v3/docs/i18nRegions/	GET / list)i18nRegion	Returns a list of content regions that the YouTube s website supports.

#### **Members**

A **member** resource represents a channel member for a YouTube channel. A member provides recurring monetary support to a creator and receives special benefits. For example, members are able to chat when the creator turns on members-only mode for a chat.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/members#resource) and list of <u>properties</u> (/youtube/v3/docs/members#properties).

Method	HTTP request	Description
URIs relative to https://www.g	googleap	is.com/youtube/v3
list (/youtube/v3/docs/members/lis	GET / st)member	Lists members (formerly known as "sponsors") for a schannel. The API request must be authorized by the channel owner.

### MembershipsLevels

A membershipsLevel resource identifies a pricing level for the creator that authorized the API request.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/membershipsLevels#resource) and list of <u>properties</u> (/youtube/v3/docs/membershipsLevels#properties).

Method	HTTP request	Description
URIs relative to https://www.googlea	pis.com/youtube/v3	
list (/youtube/v3/docs/membershipsLevels/	GET / list)membershipsLeve	Returns a collection of zero or more slsmembershipsLevel resources owned by the channel that authorized the API request. Levels are returned in implicit display order.

# PlaylistItems

A playlistItem resource identifies another resource, such as a video, that is included in a playlist. In addition, the playlistItem resource contains details about the included resource that pertain specifically to how that resource is used in that playlist.

YouTube also uses a playlist to identify a channel's list of uploaded videos, with each playlistItem in that list representing one uploaded video. You can retrieve the playlist ID for that list from the <a href="mailto:channel">channel</a> resource (/youtube/v3/docs/channels) for a given channel. You can then use the <a href="mailto:playlistItems.list">playlistItems.list</a> (/youtube/v3/docs/playlistItems/list) method to the list.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/playlistItems#resource) and list of <u>properties</u> (/youtube/v3/docs/playlistItems#properties).

Method	HTTP request	Description
URIs relative to https://www.googlea	apis.com/youtu	be/v3
<pre>delete (/youtube/v3/docs/playlistItems/delete)</pre>		Deletes a playlist item.
<pre>insert (/youtube/v3/docs/playlistItems/insert)</pre>		Adds a resource to a playlist.
list (/youtube/v3/docs/playlistItems/list)	GET / playlistItems	Returns a collection of playlist items that match the API request parameters. You can retrieve all of the playlist items in a specified playlist or retrieve one or more playlist items by their unique IDs.
update (/youtube/v3/docs/playlistItems/update		Modifies a playlist item. For example, you could update the item's position in the playlist.

# **Playlists**

A **playlist** resource represents a YouTube playlist. A playlist is a collection of videos that can be viewed sequentially and shared with other users. A playlist can contain up to 200 videos, and YouTube does not limit the number of playlists that each user creates. By default, playlists are publicly visible to other users, but playlists can be public or private.

YouTube also uses playlists to identify special collections of videos for a channel, such as:

· uploaded videos

- · positively rated (liked) videos
- watch history
- · watch later

To be more specific, these lists are associated with a channel, which is a collection of a person, group, or company's videos, playlists, and other YouTube information. You can retrieve the playlist IDs for each of these lists from the <a href="mailto:channel">channel</a> resource (/youtube/v3/docs/channels) for a given channel.

You can then use the playlistItems.list (/youtube/v3/docs/playlistItems/list) method to retrieve any of those lists. You can also add or remove items from those lists by calling the playlistItems.insert (/youtube/v3/docs/playlistItems/delete) methods.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/playlists#resource) and list of <u>properties</u> (/youtube/v3/docs/playlists#properties).

Method	HTTP request	Description
URIs relative to https://www.goog	gleapis.c	om/youtube/v3
delete (/youtube/v3/docs/playlists/delete)		Deletes a playlist. s
list (/youtube/v3/docs/playlists/list)	GET / playlist	Returns a collection of playlists that match the API srequest parameters. For example, you can retrieve all playlists that the authenticated user owns, or you can retrieve one or more playlists by their unique IDs.
<pre>insert (/youtube/v3/docs/playlists/insert)</pre>	POST / playlist	Creates a playlist. s
update (/youtube/v3/docs/playlists/update	PUT / playlist	Modifies a playlist. For example, you could change a splaylist's title, description, or privacy status.

### Search

A search result contains information about a YouTube video, channel, or playlist that matches the search parameters specified in an API request. While a search result points to a uniquely identifiable resource, like a video, it does not have its own persistent data.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/search#resource) and list of <u>properties</u> (/youtube/v3/docs/search#properties).

Method HTTP request Description

URIs relative to https://www.googleapis.com/youtube/v3

list GET / Returns a collection of search results that match the query (/youtube/v3/docs/search/list) searchparameters specified in the API request. By default, a search result set identifies matching video (/youtube/v3/docs/videos), channel (/youtube/v3/docs/channels), and playlist (/youtube/v3/docs/playlists) resources, but you can also configure queries to only retrieve a specific type of resource.

## Subscriptions

A **subscription** resource contains information about a YouTube user subscription. A subscription notifies a user when new videos are added to a channel or when another user takes one of several actions on YouTube, such as uploading a video, rating a video, or commenting on a video.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/subscriptions#resource) and list of <u>properties</u> (/youtube/v3/docs/subscriptions#properties).

Method	HTTP request	Description
URIs relative to https://www.google	apis.com/youtuk	pe/v3
delete (/youtube/v3/docs/subscriptions/delete	DELETE / e)subscriptions	Deletes a subscription.
<u>insert</u> (/youtube/v3/docs/subscriptions/inser	POST / t)subscriptions	Adds a subscription for the authenticated user's channel.
list (/youtube/v3/docs/subscriptions/list)	GET / subscriptions	Returns subscription resources that match the API request criteria.

#### **Thumbnails**

A **thumbnail** resource identifies different thumbnail image sizes associated with a resource. Please note the following characteristics of thumbnail images:

- A resource's snippet.thumbnails property is an object that identifies the thumbnail images available for that resource.
- A thumbnail resource contains a series of objects. The name of each object (default, medium, high, etc.) refers to the thumbnail image size.
- Different types of resources may support different thumbnail image sizes.
- Different types of resources may define different sizes for thumbnail images with the same name. For example, the default thumbnail image for a video resource is typically 120px by 90px, and the default thumbnail image for a channel resource is typically 88px by 88px.
- Resources of the same type may still have different thumbnail image sizes for certain images depending on the resolution of the original image or content uploaded to YouTube. For example, an HD video may support higher resolution thumbnails than non-HD videos.
- Each object that contains information about a thumbnail image size has a width property and a height property. However, the width and height properties may not be returned for that image.
- If an uploaded thumbnail image does not match the required dimensions, the image is resized to match the correct size without changing its aspect ratio. The image is not cropped, but may include black bars so that the size is correct.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/thumbnails#resource) and list of <u>properties</u> (/youtube/v3/docs/thumbnails#properties).

Method	HTTP request	Description	
URIs relative to https://www.go	ogleapis.com/y	outube/v3	
<pre>set</pre>			
(/ youtube/ vo/ docs/ thurnbrians/ se	ti) tiiuliibiia118/ Se	Land Sets it for a video.	

## VideoAbuseReportReasons

A **videoAbuseReportReason** resource contains information about a reason that a video would be flagged for containing abusive content. When your application calls the <u>videos.reportAbuse</u> (/youtube/v3/docs/videos/reportAbuse) method to report an abusive video, the request uses the information from a **videoAbuseReportReason** resource to identify the reason that the video is being reported.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/videoAbuseReportReasons#resource) and list of <u>properties</u> (/youtube/v3/docs/videoAbuseReportReasons#properties).

Method	HTTP request	Description
URIs relative to https://www.googleapis.com	n/youtube/v3	
list (/youtube/v3/docs/videoAbuseReportReasons/list	GET / st)videoAbuseReportReasor	Retrieve a list of asreasons that can be used to report abusive videos.

# VideoCategories

A **videoCategory** resource identifies a category that has been or could be associated with uploaded videos.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/videoCategories#resource) and list of <u>properties</u> (/youtube/v3/docs/videoCategories#properties).

Method	HTTP request	Description
URIs relative to https://www	.googleapis.com/youtu	ube/v3
<u>list</u>	GET /	Returns a list of categories that can be
(/youtube/v3/docs/videoCate	gories/list)videoCategori	iesassociated with YouTube videos.

### **Videos**

A **video** resource represents a YouTube video.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/videos#resource) and list of <u>properties</u> (/youtube/v3/docs/videos#properties).

Method	НТТР	request	Description
URIs relative to https://www.googl	eapis.	com/youtu	ibe/v3
<u>insert</u> (/youtube/v3/docs/videos/insert)	POST	/videos	Uploads a video to YouTube and optionally sets the video's metadata.

Method	HTTP request	Description
<u>list</u> (/youtube/v3/docs/videos/list)	GET /videos	Returns a list of videos that match the API request parameters.
<pre>delete (/youtube/v3/docs/videos/delete)</pre>	DELETE / videos	Deletes a YouTube video.
update (/youtube/v3/docs/videos/update)	PUT /videos	Updates a video's metadata.
<pre>rate (/youtube/v3/docs/videos/rate)</pre>	POST /videos/ rate	Add a like or dislike rating to a video or remove a rating from a video.
<pre>getRating (/youtube/v3/docs/videos/getRating)</pre>	GET /videos/ getRating	Retrieves the ratings that the authorized user gave to a list of specified videos.
reportAbuse (/youtube/v3/docs/videos/reportAbuse		Report a video for containing abusive content.

### Watermarks

A watermark resource identifies an image that displays during playbacks of a specified channel's videos. You can also specify a target channel to which the image will link as well as timing details that determine when the watermark appears during video playbacks and the length of time it is visible.

For more information about this resource, see its <u>resource representation</u> (/youtube/v3/docs/watermarks#resource) and list of <u>properties</u> (/youtube/v3/docs/watermarks#properties).

Method	HTTP request	Description
URIs relative to https://www.googleapis.com/youtube/v3		
<pre>set (/youtube/v3/docs/watermarks/set)</pre>	POST / watermarks/set	Uploads a watermark image to YouTube and sets it for a channel.
unset (/youtube/v3/docs/watermarks/unse	POST / t)watermarks/ unset	Deletes a channel's watermark image.

Except as otherwise noted, the content of this page is licensed under the <u>Creative Commons Attribution 4.0</u>
<u>License</u> (https://creativecommons.org/licenses/by/4.0/), and code samples are licensed under the <u>Apache</u>
<u>2.0 License</u> (https://www.apache.org/licenses/LICENSE-2.0). For details, see the <u>Google Developers Site</u>

<u>Policies</u> (https://developers.google.com/site-policies). Java is a registered trademark of Oracle and/or its affiliates.

Last updated 2021-05-12 UTC.