

April 3, 2022

PURPOSE: Focus is Google API, youtube in particular. This is summary of using cURL to obtain authorization_code, followed by and then proceed querying youtube.

USAGE: This is a markdown, md, file. All zsh code is treated as verbatim. To run the zsh, use the neovim terminal and then the short cut ,tl.

Once something is working convert to a zsh script file. But THIS document be NEAT summary.

- ~/.Renviron for secrets
- Source: <https://developers.google.com/youtube/v3/guides/auth/installed-apps>
- zsh, '&' is special. Use single quotes around it to avoid errors.

REF: <https://stackoverflow.com/questions/53357741/how-to-perform-oauth-2-0-using-the-curl-cli#53357742>et CLIENT_ID=Replace_with_your_Client_ID

Youtube constants

```
auth_url=https://accounts.google.com/o/oauth2/v2/auth
token_url=https://oauth2.googleapis.com/token
base_url=https://www.googleapis.com/youtube/v3
uri_redirect=
# Per google docs, scopes are separated by whitespace
scope='https://www.googleapis.com/auth/youtube https://www.googleapis.com/auth/youtube.force-ssl'

client_id=$(Rscript -e "cat(Sys.getenv('OAUTH2_ID'))")
```

Run this in neovim termina, copy+paste into browser, which asks user permission and then returns auth.code !

```
echo \
'https://accounts.google.com/o/oauth2/v2/auth?' \
'client_id=$client_id&redirect_uri=urn:ietf:wg:oauth:2.0:oob' \
'&scope=$scope'&response_type=code'
```

We now have auth code. PURPOSE: HTTR2:: Given ONE video, return ALL Comments Authorization: Bearer [YOUR_ACCESS_TOKEN]
Accept: application/json

(1APR2022)

```
Google's example, with loop for uri_redirect
https://accounts.google.com/o/oauth2/v2/auth?
scope=https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fyoutube.readonly&
response_type=code&
state=security_token%3D138r5719ru3e1%26url%3Dhttps%3A%2F%2Foauth2.example.com%2Ftoken&
redirect_uri=http%3A%2F%2F127.0.0.1%3A9004&
client_id=client_id
```

- Google's authorization server: <https://accounts.google.com/o/oauth2/v2/auth>

Request: appropriate query sent to:

GET <https://www.googleapis.com/youtube/v3/commentThreads>

From Explorer

GET [https://youtube.googleapis.com/youtube/v3/playlists?part=snippet%2CcontentDetails&maxResults=5&mine=true&key=\[YOUR_API_KEY\]](https://youtube.googleapis.com/youtube/v3/playlists?part=snippet%2CcontentDetails&maxResults=5&mine=true&key=[YOUR_API_KEY]) HTTP/1.1

Authorization: Bearer [YOUR_ACCESS_TOKEN]
Accept: application/json

same, but as Curl

```
curl \
'https://youtube.googleapis.com/youtube/v3/playlists?part=snippet%2CcontentDetails&maxResults=5&mine=true&key=[YOUR_API_KEY]' \
--header 'Authorization: Bearer [YOUR_ACCESS_TOKEN]' \
--header 'Accept: application/json' \
--compressed
```

From Google Playground

```
https://youtube.googleapis.com/youtube/v3/commentThreads?\
videoId=Mec9sw1cJk8&part=snippet,replies
```

LEGACY

```
# =====
#
#
# from Windows
# =====
CLIENT_SECRET=Replace_with_your_Client_Secret
set SCOPE=https://www.googleapis.com/auth/cloud-platform
set ENDPOINT=https://accounts.google.com/o/oauth2/v2/auth

set URL="%ENDPOINT%?client_id=%CLIENT_ID%&response_type=code&scope=%SCOPE%&access_type=offline&redirect_uri=urn:ietf:wg:oauth:2.0:oob"

@REM start iexplore %URL%
@REM start microsoft-edge:%URL%
start chrome %URL%

set /p AUTH_CODE="Enter Code displayed in browser: "
# =====

# translate to cURL
curl ^
--data client_id=%CLIENT_ID% ^
--data client_secret=%CLIENT_SECRET% ^
--data code=%AUTH_CODE% ^
--data redirect_uri=urn:ietf:wg:oauth:2.0:oob ^
--data grant_type=authorization_code ^
https://www.googleapis.com/oauth2/v4/token
```