

## Report question 4 of Lab 3

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This is the information we found in the header of the video container:

- Its seems that is encoded in mp4, I marked in red, so it must use MPEG-DASH, as HLS doesn't support this format and DASH does.

#### Request URL:

[https://rr3---sn-h5q7kned.googlevideo.com/videoplayback?expire=1671066597&ei=hR-ay43TJ4uUW9CstOgG&ip=79.158.171.72&id=o-AEz\\_plrHHjKfXVjVYHc7eAndA4u-FFpKRG3JIH4Qc66L&itag=397&aitags=133%2C134%2C135%2C136%2C137%2C160%2C242%2C243%2C244%2C247%2C248%2C278%2C394%2C395%2C396%2C397%2C398%2C399&source=youtube&requiressl=yes&mh=2M&mm=31%2C29&mn=sn-h5q7kned%2Csn-h5qzen76&ms=au%2Crdu&mv=m&mvi=3&pl=22&initcwndbps=1146250&spc=zlddbBS6175pOUq8KtDjBc8KQcpfq17FD3o0bl3AzxKQ&vpv=1&mime=video%2Fmp4&ns=Fhh97mHcOxS-0CcS0MFv\\_L8K&gir=yes&cflen=62661262&dur=1187.480&imt=1633146185279979&mt=1671044731&fvip=5&keepalive=yes&fexp=24001373%2C24007246&c=WEB&txp=5436434&n=sQ1bOYqgViYMyQ&sparams=expire%2Cei%2Cip%2Cid%2Caitags%2Csource%2Crequiressl%2Cspc%2Cvpv%2Cmime%2Cns%2Cgir%2Cflen%2Cdur%2Clmt&sig=AOq0QJ8wRQlHAn2wOoUwD\\_bB7MeO2ScTPPwnarJ8Yj55bxv-OvCHdmRgAiAoakL4qZBiR2dgcZhHaRjJNp1X967SmCAyoqB1UNJDHg%3D%3D&lparams=mh%2Cmm%2Cmn%2Cms%2Cmv%2Cmvi%2Cpl%2Cinitcwndbps&lsig=AG3C\\_xAwRAIgbwaQxn0NsF4IKqmu1mFdeDqa4eKqzx4w\\_7vPwfl97PACIB6Tos9pNjMViHgeZkWYUOWMEgldBi61v-GrMbV\\_5QR3&alr=yes&cpn=ZZw4ib6r36LTVxh&cver=2.20221207.05.00&range=47285200-47551485&rn=15&rbuf=36480&pot=D\\_vARbnsR\\_B3-\\_jMyJ5h36GNE9PGPVs8aA8T8i3PvuTkYe\\_Yr6wED3LSD\\_aOp8n9gdfVqTleFxvtmGBCStE\\_OczMYymnATmignvB6kboTVJWJA6ykWZgF8pnBR4=](https://rr3---sn-h5q7kned.googlevideo.com/videoplayback?expire=1671066597&ei=hR-ay43TJ4uUW9CstOgG&ip=79.158.171.72&id=o-AEz_plrHHjKfXVjVYHc7eAndA4u-FFpKRG3JIH4Qc66L&itag=397&aitags=133%2C134%2C135%2C136%2C137%2C160%2C242%2C243%2C244%2C247%2C248%2C278%2C394%2C395%2C396%2C397%2C398%2C399&source=youtube&requiressl=yes&mh=2M&mm=31%2C29&mn=sn-h5q7kned%2Csn-h5qzen76&ms=au%2Crdu&mv=m&mvi=3&pl=22&initcwndbps=1146250&spc=zlddbBS6175pOUq8KtDjBc8KQcpfq17FD3o0bl3AzxKQ&vpv=1&mime=video%2Fmp4&ns=Fhh97mHcOxS-0CcS0MFv_L8K&gir=yes&cflen=62661262&dur=1187.480&imt=1633146185279979&mt=1671044731&fvip=5&keepalive=yes&fexp=24001373%2C24007246&c=WEB&txp=5436434&n=sQ1bOYqgViYMyQ&sparams=expire%2Cei%2Cip%2Cid%2Caitags%2Csource%2Crequiressl%2Cspc%2Cvpv%2Cmime%2Cns%2Cgir%2Cflen%2Cdur%2Clmt&sig=AOq0QJ8wRQlHAn2wOoUwD_bB7MeO2ScTPPwnarJ8Yj55bxv-OvCHdmRgAiAoakL4qZBiR2dgcZhHaRjJNp1X967SmCAyoqB1UNJDHg%3D%3D&lparams=mh%2Cmm%2Cmn%2Cms%2Cmv%2Cmvi%2Cpl%2Cinitcwndbps&lsig=AG3C_xAwRAIgbwaQxn0NsF4IKqmu1mFdeDqa4eKqzx4w_7vPwfl97PACIB6Tos9pNjMViHgeZkWYUOWMEgldBi61v-GrMbV_5QR3&alr=yes&cpn=ZZw4ib6r36LTVxh&cver=2.20221207.05.00&range=47285200-47551485&rn=15&rbuf=36480&pot=D_vARbnsR_B3-_jMyJ5h36GNE9PGPVs8aA8T8i3PvuTkYe_Yr6wED3LSD_aOp8n9gdfVqTleFxvtmGBCStE_OczMYymnATmignvB6kboTVJWJA6ykWZgF8pnBR4=)

**Request Method:** POST

**Status Code:** 200

**Remote Address:** 74.125.97.168:443

**Referrer Policy:** strict-origin-when-cross-origin

#### Response Headers

**accept-ranges:** bytes

**access-control-allow-credentials:** true

**access-control-allow-origin:** https://www.youtube.com

**access-control-expose-headers:** Client-Protocol, Content-Length, Content-Type,

X-Bandwidth-Est, X-Bandwidth-Est2, X-Bandwidth-Est3, X-Bandwidth-App-Limited,

X-Bandwidth-Est-App-Limited, X-Bandwidth-Est-Comp, X-Bandwidth-Avg,  
X-Head-Time-Millis, X-Head-Time-Sec, X-Head-Seqnum, X-Response-Itag,  
X-Restrict-Formats-Hint, X-Sequence-Num, X-Segment-Lmt, X-Walltime-Ms  
**alt-svc:** h3=":443"; ma=2592000,h3-29=":443"; ma=2592000,h3-Q050=":443";  
ma=2592000,h3-Q046=":443"; ma=2592000,h3-Q043=":443"; ma=2592000,quic=":443";  
ma=2592000; v="46,43"  
**cache-control:** private, max-age=21278  
**client-protocol:** quic  
**content-length:** 266286  
**content-type:** video/mp4  
**cross-origin-resource-policy:** cross-origin  
**date:** Wed, 14 Dec 2022 19:10:19 GMT  
**expires:** Wed, 14 Dec 2022 19:10:19 GMT  
**last-modified:** Sat, 02 Oct 2021 03:43:05 GMT  
**server:** gvs 1.0  
**timing-allow-origin:** https://www.youtube.com  
**vary:** Origin  
**x-content-type-options:** nosniff  
**x-restrict-formats-hint:** None

#### Request Headers

**:authority:** rr3---sn-h5q7kned.googlevideo.com  
**:method:** POST  
**:path:**  
/videoplayback?expire=1671066597&ei=hR-aY43TJ4uUW9CstOgG&ip=79.158.171.72&id=o  
-AEz\_plrHHjKfXVjVYHc7eAndA4u-FFpKRG3JIH4Qc66L&itag=397&aitags=133%2C134%2C  
135%2C136%2C137%2C160%2C242%2C243%2C244%2C247%2C248%2C278%2C394%  
2C395%2C396%2C397%2C398%2C399&source=youtube&requiressl=yes&mh=2M&mm=3  
1%2C29&mn=sn-h5q7kned%2Csn-h5qzen76&ms=au%2Crdu&mv=m&mvi=3&pl=22&initcwn  
dbps=1146250&spc=zlddbBS6175pOUq8KtDjBc8kQcpcfql7FD3o0bl3AzxKQ&vprv=1&mime=  
video%2Fmp4&ns=Fhh97mHcOxS-0CcS0MFv\_L8K&gir=yes&cflen=62661262&dur=1187.48  
0&fmt=1633146185279979&mt=1671044731&fvip=5&keepalive=yes&fexp=24001373%2C2  
4007246&c=WEB&txp=5436434&n=sQ1bOYqgViYMyQ&sparams=expire%2Cei%2Cip%2Ci  
d%2Caitags%2Csource%2Crequiressl%2Cspc%2Cvprv%2Cmime%2Cns%2Cgir%2Cflen%  
2Cdur%2Cfmt&sig=AOq0QJ8wRQlhAN2wOoUwD\_bB7MeO2ScTPpWnarJ8Yj55bxv-OvCHd  
mRgAiAOakL4qZBiR2dgcZhHaRjJNp1X967SmCAyoqB1UNJDHg%3D%3D&lsparams=mh%  
2Cmm%2Cmn%2Cms%2Cmv%2Cmvi%2Cpl%2Cinitcwndbps&lsig=AG3C\_xAwRAIgbwaQx  
n0NsF4IKqmu1mFdeDqa4eKqzx4w\_7vPwfl97PACIB6Tos9pNJmViHgeZkWYUOWMEgldBi6  
1v-GrMbV\_5QR3&alr=yes&cpn=ZZwl4ib6r36LTVxh&cver=2.20221207.05.00&range=472852  
00-47551485&rn=15&rbuf=36480&pot=D\_vARbnsR\_B3-\_jMyJ5h36GNE9PGPVs8aA8T8i3P

vuTkYe\_Yr6wED3LSD\_aOp8n9gdfVqTleFxvtmGBCSTe\_OczMYymnATmigvnB6kboTVJWJA  
6ykWZgF8pnBR4=

**:scheme:** https

**accept:** /\*

**accept-encoding:** gzip, deflate, br

**accept-language:** es-ES,es;q=0.9

**content-length:** 2

**origin:** https://www.youtube.com

**referer:** https://www.youtube.com/

**sec-ch-ua:** "Not?A\_Brand";v="8", "Chromium";v="108", "Google Chrome";v="108"

**sec-ch-ua-arch:** "x86"

**sec-ch-ua-bitness:** "64"

**sec-ch-ua-full-version:** "108.0.5359.99"

**sec-ch-ua-full-version-list:** "Not?A\_Brand";v="8.0.0.0", "Chromium";v="108.0.5359.99",  
"Google Chrome";v="108.0.5359.99"

**sec-ch-ua-mobile:** ?0

**sec-ch-ua-model:**

**sec-ch-ua-platform:** "Windows"

**sec-ch-ua-platform-version:** "0.3.0"

**sec-ch-ua-wow64:** ?0

**sec-fetch-dest:** empty

**sec-fetch-mode:** cors

**sec-fetch-site:** cross-site

**user-agent:** Mozilla/5.0 (Windows NT 6.3; Win64; x64) AppleWebKit/537.36 (KHTML, like  
Gecko) Chrome/108.0.0.0 Safari/537.36

**x-client-data:**

CJC2yQEIo7bJAQjEtskBCKmdygElxuzKAQiTocsBCP7EzAEI7/LMAQjN+cwBCOH5zAEI4/rMAQjv/8wBClaBzQEI  
r4LNAQ==

Decoded:

message ClientVariations {

// Active client experiment variation IDs.

repeated int32 variation\_id = [3300112, 3300131, 3300164, 3313321, 3323462, 3330195, 3351166, 3357039,  
3357901, 3357921, 3358051, 3358703, 3358854, 3359023];

}