

3. domaća zadaća: prijenos videa putem Interneta

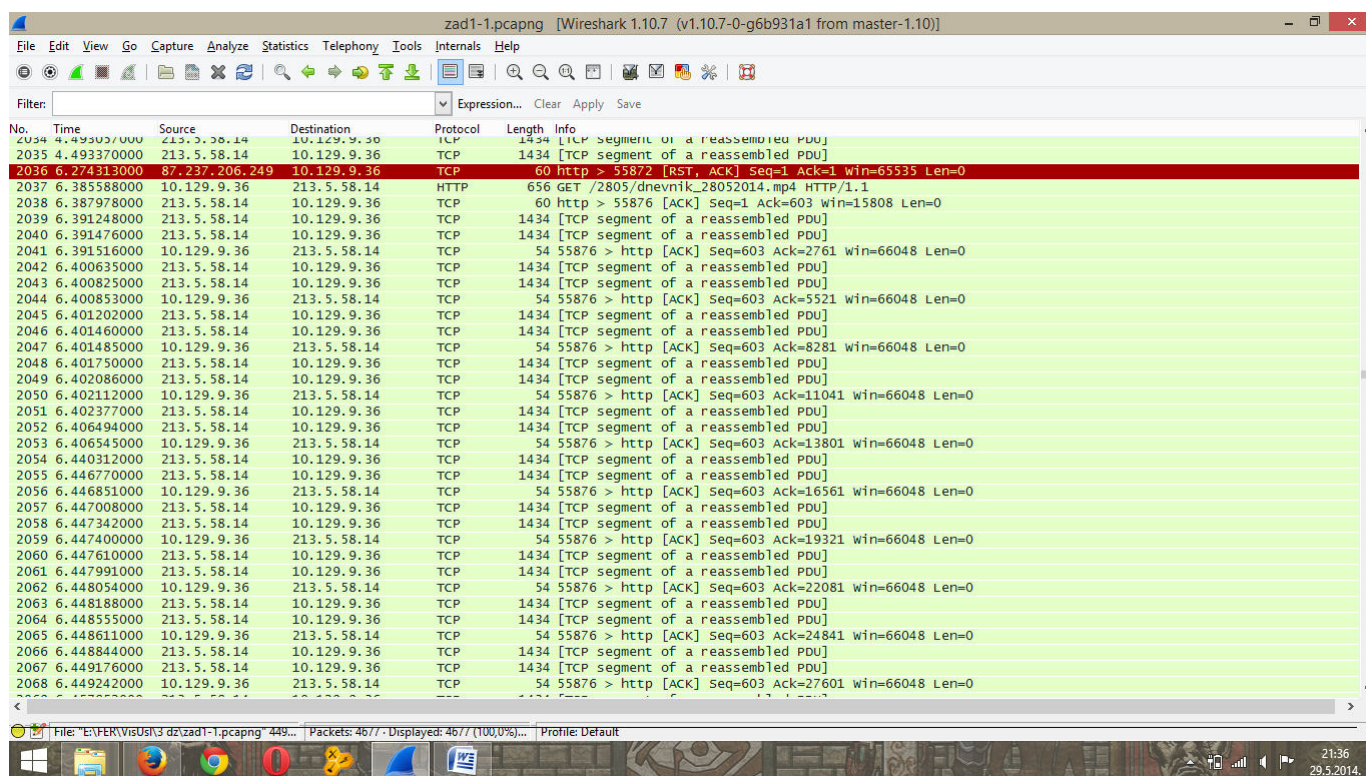
(1) Proučite uslugu televizije na zahtjev. Hrvatska radiotelevizija nudi HRT-emisije na zahtjev (<http://www.hrt.hr/index.php?id=en2>) i HRT-uživo (<http://www.hrt.hr/index.php?id=hrt-uzivo>). Slovenska televizija također nudi emisije na zahtjev (<http://4d.rtvlo.si/arhiv/>). Potrebno je proučiti sljedeća tri scenarija pomoću alata *Wireshark* i komentirati pomoću kojih se protokola pristupa televizijskom sadržaju (za svaki scenarij je potrebno priložiti i prikaz snimljenog prometa, npr. putem naredbe *print screen*):

- (a) Snimite promet usluge HRT-na zahtjev. Utvrdite koji se protokoli koriste (od transportnog sloja naviše) te koji je korišteni format videa.

Transportni: TCP

Aplikacijski: DNS, HTTP, TLS, DHCP

Format videa: MP4



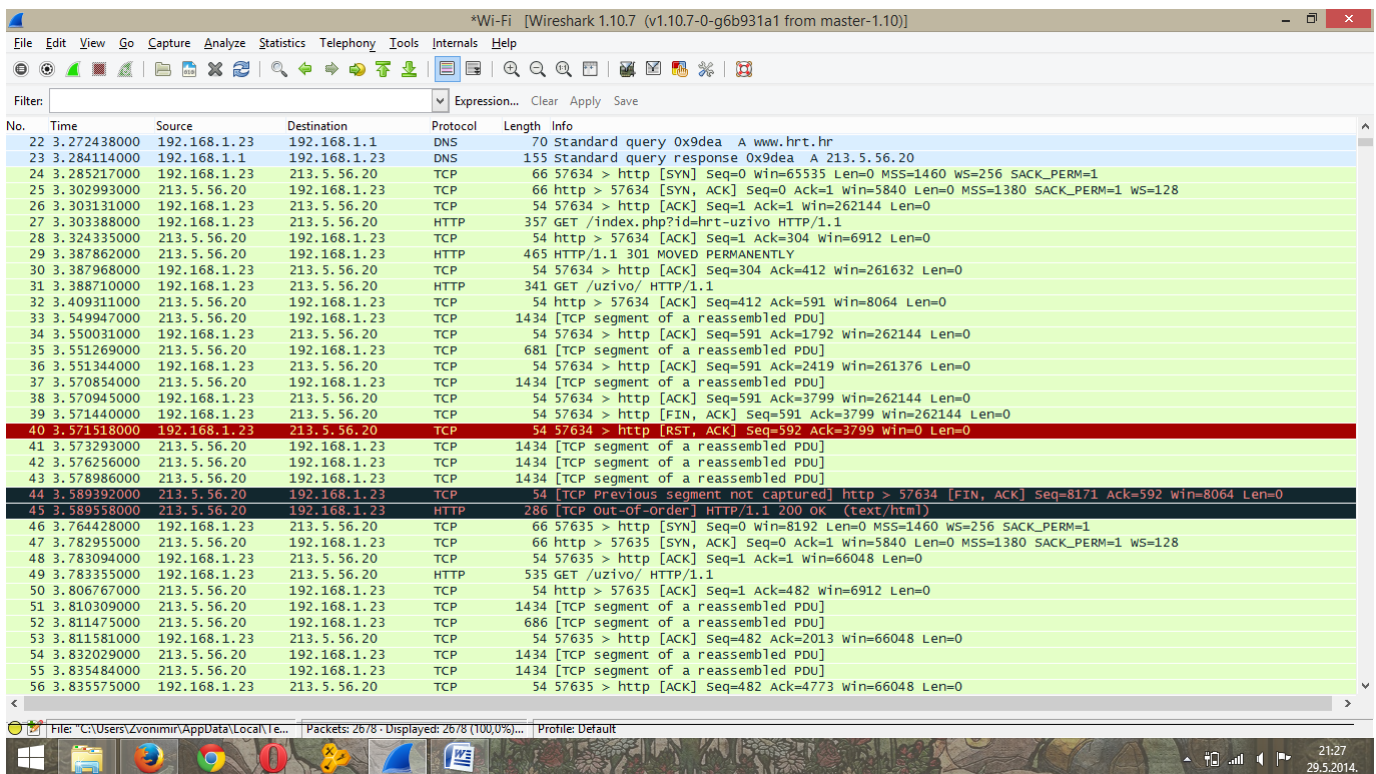
- (b) Snimite promet usluge HRT-uživo. Utvrdite koji se protokoli koriste (od transportnog sloja naviše) te koji je korišteni format videa.

Napomena: usluga HRT-uživo nedostupna je za vrijeme emitiranja emisija koje u TV-rasporedu imaju oznaku „kodirano za satelitski program“.

Transportni: TCP

Aplikacijski: DNS, HTTP, TLS, DHCP

Format videa: FLV

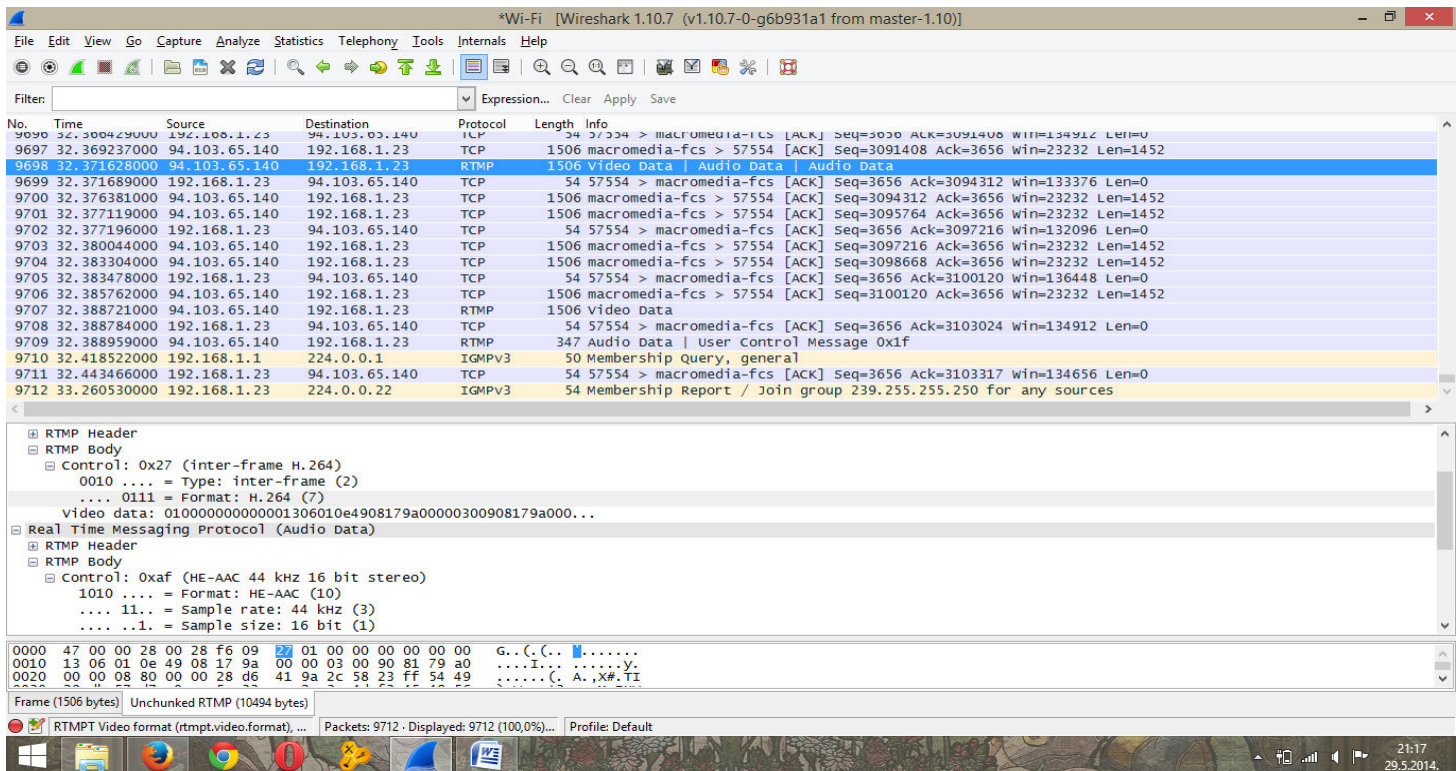


No.	Time	Source	Destination	Protocol	Length	Info
22	3.272438000	192.168.1.23	192.168.1.1	DNS	70	Standard query 0x9dea A www.hrt.hr
23	3.284114000	192.168.1.1	192.168.1.23	DNS	155	Standard query response 0x9dea A 213.5.56.20
24	3.285217000	192.168.1.23	213.5.56.20	TCP	66	57634 > http [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM=1
25	3.302993000	213.5.56.20	192.168.1.23	TCP	66	http > 57634 [SYN, ACK] Seq=0 Ack=1 Win=5840 Len=0 MSS=1380 SACK_PERM=1 WS=128
26	3.303131000	192.168.1.23	213.5.56.20	TCP	54	57634 > http [ACK] Seq=1 Ack=1 Win=262144 Len=0
27	3.303388000	192.168.1.23	213.5.56.20	HTTP	357	GET /index.php?id=hrt-uzivo HTTP/1.1
28	3.324335000	213.5.56.20	192.168.1.23	TCP	54	http > 57634 [ACK] Seq=1 Ack=304 Win=6912 Len=0
29	3.387862000	213.5.56.20	192.168.1.23	HTTP	465	HTTP/1.1 301 MOVED PERMANENTLY
30	3.387968000	192.168.1.23	213.5.56.20	TCP	54	57634 > http [ACK] Seq=304 Ack=412 Win=261632 Len=0
31	3.388710000	192.168.1.23	213.5.56.20	HTTP	341	GET /uzivo/ HTTP/1.1
32	3.409311000	213.5.56.20	192.168.1.23	TCP	54	http > 57634 [ACK] Seq=412 Ack=591 Win=8064 Len=0
33	3.549947000	213.5.56.20	192.168.1.23	TCP	1434	[TCP segment of a reassembled PDU]
34	3.550031000	192.168.1.23	213.5.56.20	TCP	54	57634 > http [ACK] Seq=591 Ack=1792 Win=262144 Len=0
35	3.551269000	213.5.56.20	192.168.1.23	TCP	681	[TCP segment of a reassembled PDU]
36	3.551344000	192.168.1.23	213.5.56.20	TCP	54	57634 > http [ACK] Seq=591 Ack=2419 Win=261376 Len=0
37	3.570854000	213.5.56.20	192.168.1.23	TCP	1434	[TCP segment of a reassembled PDU]
38	3.570945000	192.168.1.23	213.5.56.20	TCP	54	57634 > http [ACK] Seq=591 Ack=3799 Win=262144 Len=0
39	3.571440000	192.168.1.23	213.5.56.20	TCP	54	57634 > http [FIN, ACK] Seq=591 Ack=3799 Win=262144 Len=0
40	3.571518000	192.168.1.23	213.5.56.20	TCP	54	57634 > http [RST, ACK] Seq=592 Ack=3799 Win=0 Len=0
41	3.573293000	213.5.56.20	192.168.1.23	TCP	1434	[TCP segment of a reassembled PDU]
42	3.576256000	213.5.56.20	192.168.1.23	TCP	1434	[TCP segment of a reassembled PDU]
43	3.578986000	213.5.56.20	192.168.1.23	TCP	1434	[TCP segment of a reassembled PDU]
44	3.589392000	213.5.56.20	192.168.1.23	TCP	54	[TCP Previous segment not captured] http > 57634 [FIN, ACK] Seq=8171 Ack=592 Win=8064 Len=0
45	3.589558000	213.5.56.20	192.168.1.23	HTTP	286	[TCP out-of-order] HTTP/1.1 200 OK (text/html)
46	3.764428000	192.168.1.23	213.5.56.20	TCP	66	57635 > http [SYN] Seq=0 Win=8192 Len=0 MSS=1460 WS=256 SACK_PERM=1
47	3.782955000	213.5.56.20	192.168.1.23	TCP	66	http > 57635 [SYN, ACK] Seq=0 Ack=1 Win=5840 Len=0 MSS=1380 SACK_PERM=1 WS=128
48	3.783094000	192.168.1.23	213.5.56.20	TCP	54	57635 > http [ACK] Seq=1 Ack=1 Win=66048 Len=0
49	3.783355000	192.168.1.23	213.5.56.20	HTTP	535	GET /uzivo/ HTTP/1.1
50	3.806767000	213.5.56.20	192.168.1.23	TCP	54	http > 57635 [ACK] Seq=1 Ack=482 Win=6912 Len=0
51	3.810309000	213.5.56.20	192.168.1.23	TCP	1434	[TCP segment of a reassembled PDU]
52	3.811475000	213.5.56.20	192.168.1.23	TCP	686	[TCP segment of a reassembled PDU]
53	3.811581000	192.168.1.23	213.5.56.20	TCP	54	57635 > http [ACK] Seq=482 Ack=2013 Win=66048 Len=0
54	3.832029000	213.5.56.20	192.168.1.23	TCP	1434	[TCP segment of a reassembled PDU]
55	3.835484000	213.5.56.20	192.168.1.23	TCP	1434	[TCP segment of a reassembled PDU]
56	3.835575000	192.168.1.23	213.5.56.20	TCP	54	57635 > http [ACK] Seq=482 Ack=4773 Win=66048 Len=0

- (c) Snimite promet RTV SLO prilikom gledanja emisija na zahtjev. Proučite pakete protokola RTMP te utvrdite koji se kodeci koriste za audio, a koji za video tokove.

AUDIO: HE-AAC

VIDEO: H.264



No.	Time	Source	Destination	Protocol	Length	Info
9698	32.371628000	94.103.65.140	192.168.1.23	RTMP	1506	Video Data Audio Data Audio Data
9699	32.371689000	192.168.1.23	94.103.65.140	TCP	54	57554 > macromedia-fcs [ACK] Seq=3656 Ack=3094312 Win=133376 Len=0
9700	32.376381000	94.103.65.140	192.168.1.23	TCP	1506	macromedia-fcs > 57554 [ACK] Seq=3094312 Ack=3656 Win=23232 Len=1452
9701	32.377119000	94.103.65.140	192.168.1.23	TCP	1506	macromedia-fcs > 57554 [ACK] Seq=3095764 Ack=3656 Win=23232 Len=1452
9702	32.377196000	192.168.1.23	94.103.65.140	TCP	54	57554 > macromedia-fcs [ACK] Seq=3656 Ack=3097216 Win=132096 Len=0
9703	32.380044000	94.103.65.140	192.168.1.23	TCP	1506	macromedia-fcs > 57554 [ACK] Seq=3097216 Ack=3656 Win=23232 Len=1452
9704	32.383304000	94.103.65.140	192.168.1.23	TCP	1506	macromedia-fcs > 57554 [ACK] Seq=3098668 Ack=3656 Win=23232 Len=1452
9705	32.383478000	192.168.1.23	94.103.65.140	TCP	54	57554 > macromedia-fcs [ACK] Seq=3656 Ack=3100120 Win=136448 Len=0
9706	32.385762000	94.103.65.140	192.168.1.23	TCP	1506	macromedia-fcs > 57554 [ACK] Seq=3100120 Ack=3656 Win=23232 Len=1452
9707	32.388721000	94.103.65.140	192.168.1.23	RTMP	1506	Video Data
9708	32.388784000	192.168.1.23	94.103.65.140	TCP	54	57554 > macromedia-fcs [ACK] Seq=3656 Ack=3103024 Win=134912 Len=0
9709	32.388959000	94.103.65.140	192.168.1.23	RTMP	347	Audio Data User Control Message 0x1f
9710	32.418522000	192.168.1.1	224.0.0.1	IGMPV3	50	Membership Query, general
9711	32.443466000	192.168.1.23	94.103.65.140	TCP	54	57554 > macromedia-fcs [ACK] Seq=3656 Ack=3103317 Win=134656 Len=0
9712	33.260530000	192.168.1.23	224.0.0.22	IGMPV3	54	Membership Report / Join group 239.255.255.250 for any sources

RTMP Header

RTMP Body

Control: 0x27 (inter-frame H.264)

0010 = Type: inter-frame (2)

.... 0111 = Format: H.264 (7)

Video data: 010000000000001306010e4908179a00000300908179a000...

Real Time Messaging Protocol (Audio Data)

RTMP Header

RTMP Body

Control: 0xaf (HE-AAC 44 kHz 16 bit stereo)

1010 = Format: HE-AAC (10)

.... 11.. = Sample rate: 44 kHz (3)

.... ..1. = Sample size: 16 bit (1)

0000 47 00 00 28 00 28 f6 09 01 00 00 00 00 00 00 00 00 G..(.....

0010 13 06 01 0e 49 08 17 9a 00 00 03 00 90 81 79 a0I.....

0020 00 00 08 80 00 00 28 d6 41 9a 2c 58 23 ff 54 49(A,X#..TI

Frame (1506 bytes) Unchunked RTMP (10494 bytes)

RTMP Video format (rtmp.video.format), ... Packets: 9712 - Displayed: 9712 (100.0%) Profile: Default

- (2) Pristupite portalu YouTube (www.youtube.com) putem osobnog računala te odaberite bilo koji video sadržaj. Pokrenite snimanje prometa prije nego što se učita web stranica s video sadržajem kako biste mogli pratiti komunikaciju od samog početka! Nakon kratkog vremena prikazivanja (npr., 5 sekundi ili više), promijenite kvalitetu sadržaja. Odgovorite na sljedeća pitanja:

- (a) Pronađite *YouTube ID* video sadržaja koji ste zatražili (*YouTube ID* je oznaka videa koja se sastoji od velikih i malih slova te znamenaka, a može se pročitati iz URI-a videa kao vrijednost parametra *v* koja slijedi nakon <http://www.youtube.com/watch?v=>)

HOQxxNYSHR0

- (b) Koja je zatražena rezolucija videa?

360p na početku, kasnije promijenjeno na 480p

- (c) Koja je IP-adresa *front-end* web poslužitelja na koji ste se inicijalno spojili? Priložite prikaz snimljenog prometa iz alata *Wireshark* gdje se vidi slanje inicijalnog zahtjeva.

208.117.229.180

- (d) Koja je IP-adresa poslužitelja na kojem se nalazi sam video sadržaj (faza gledanja prije promjene kvalitete)? Priložite prikaz snimljenog prometa gdje se vidi postupno preuzimanje sadržaja s navedenog poslužitelja.

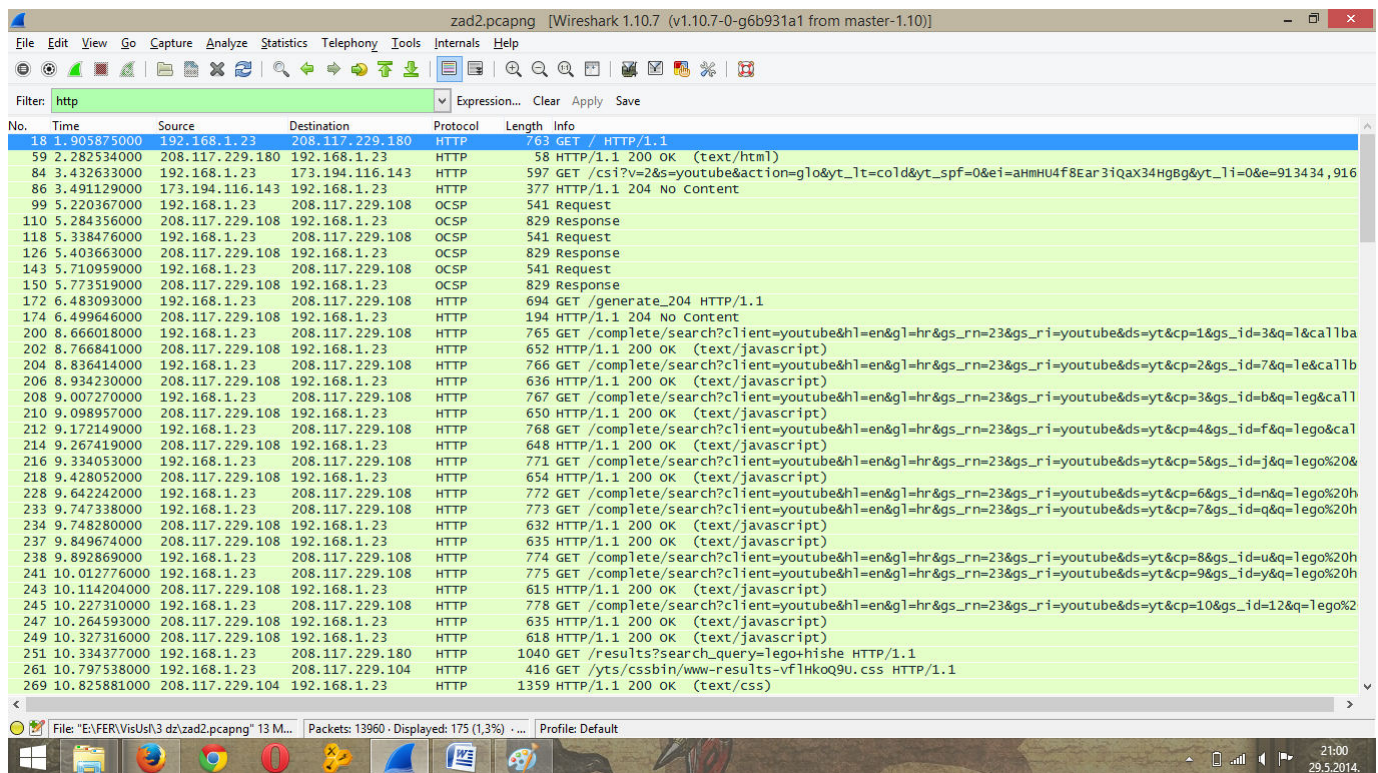
208.117.229.145

- (e) Povećajte kvalitetu video sadržaja. Što se dogodilo? Šalje li se novi zahtjev prema poslužitelju?

Kada povećamo kvalitetu sadržaja šalje se novi zahtjev prema poslužitelju.

- (f) Što se dogodi ako „skočite“ unaprijed u vremenu (do dijela sadržaja koji još nije preuzet)?

Šalje se novi zahtjev prema poslužitelju.



No.	Time	Source	Destination	Protocol	Length	Info
18	1.905875000	192.168.1.23	208.117.229.180	HTTP	763	GET / HTTP/1.1
59	2.282534000	208.117.229.180	192.168.1.23	HTTP	58	HTTP/1.1 200 OK (text/html)
84	3.432633000	192.168.1.23	173.194.116.143	HTTP	597	GET /cs?/v=2&s=youtube&action=glo&yt_spf=0&ei=aHMHU4f8Ea3iQx34Hg8g&yt_li=0&e=913434,916
86	3.491129000	173.194.116.143	192.168.1.23	HTTP	377	HTTP/1.1 204 No Content
99	5.220367000	192.168.1.23	208.117.229.108	OCSP	541	Request
110	5.284356000	208.117.229.108	192.168.1.23	OCSP	829	Response
118	5.338476000	192.168.1.23	208.117.229.108	OCSP	541	Request
126	5.403663000	208.117.229.108	192.168.1.23	OCSP	829	Response
143	5.710959000	192.168.1.23	208.117.229.108	OCSP	541	Request
150	5.773519000	208.117.229.108	192.168.1.23	OCSP	829	Response
172	6.483093000	192.168.1.23	208.117.229.108	HTTP	694	GET /generate_204 HTTP/1.1
174	6.499646000	208.117.229.108	192.168.1.23	HTTP	194	HTTP/1.1 204 No Content
200	8.666018000	192.168.1.23	208.117.229.108	HTTP	765	GET /complete/search?client=youtube&hl=en&gl=hr&gs_rn=23&gs_ri=youtube&ds=yt&cp=1&gs_id=3&q=1&callba
204	8.766841000	208.117.229.108	192.168.1.23	HTTP	652	HTTP/1.1 200 OK (text/javascript)
204	8.836414000	192.168.1.23	208.117.229.108	HTTP	766	GET /complete/search?client=youtube&hl=en&gl=hr&gs_rn=23&gs_ri=youtube&ds=yt&cp=2&gs_id=7&q=1&callba
206	8.934230000	208.117.229.108	192.168.1.23	HTTP	636	HTTP/1.1 200 OK (text/javascript)
208	9.007270000	192.168.1.23	208.117.229.108	HTTP	767	GET /complete/search?client=youtube&hl=en&gl=hr&gs_rn=23&gs_ri=youtube&ds=yt&cp=3&gs_id=b&q=1&leg&call
210	9.098957000	208.117.229.108	192.168.1.23	HTTP	650	HTTP/1.1 200 OK (text/javascript)
212	9.172149000	192.168.1.23	208.117.229.108	HTTP	768	GET /complete/search?client=youtube&hl=en&gl=hr&gs_rn=23&gs_ri=youtube&ds=yt&cp=4&gs_id=f&q=1&leg&call
214	9.267419000	208.117.229.108	192.168.1.23	HTTP	648	HTTP/1.1 200 OK (text/javascript)
216	9.334053000	192.168.1.23	208.117.229.108	HTTP	771	GET /complete/search?client=youtube&hl=en&gl=hr&gs_rn=23&gs_ri=youtube&ds=yt&cp=5&gs_id=j&q=1&lego%20&
218	9.428052000	208.117.229.108	192.168.1.23	HTTP	654	HTTP/1.1 200 OK (text/javascript)
228	9.642242000	192.168.1.23	208.117.229.108	HTTP	772	GET /complete/search?client=youtube&hl=en&gl=hr&gs_rn=23&gs_ri=youtube&ds=yt&cp=6&gs_id=n&q=1&lego%20h
233	9.747338000	192.168.1.23	208.117.229.108	HTTP	773	GET /complete/search?client=youtube&hl=en&gl=hr&gs_rn=23&gs_ri=youtube&ds=yt&cp=7&gs_id=q&q=1&lego%20h
234	9.748280000	208.117.229.108	192.168.1.23	HTTP	632	HTTP/1.1 200 OK (text/javascript)
237	9.849674000	208.117.229.108	192.168.1.23	HTTP	635	HTTP/1.1 200 OK (text/javascript)
238	9.892869000	192.168.1.23	208.117.229.108	HTTP	774	GET /complete/search?client=youtube&hl=en&gl=hr&gs_rn=23&gs_ri=youtube&ds=yt&cp=8&gs_id=u&q=1&lego%20h
241	10.012776000	192.168.1.23	208.117.229.108	HTTP	775	GET /complete/search?client=youtube&hl=en&gl=hr&gs_rn=23&gs_ri=youtube&ds=yt&cp=9&gs_id=y&q=1&lego%20h
243	10.114204000	208.117.229.108	192.168.1.23	HTTP	615	HTTP/1.1 200 OK (text/javascript)
245	10.227310000	192.168.1.23	208.117.229.108	HTTP	778	GET /complete/search?client=youtube&hl=en&gl=hr&gs_rn=23&gs_ri=youtube&ds=yt&cp=10&gs_id=12&q=1&lego%2
247	10.264593000	208.117.229.108	192.168.1.23	HTTP	635	HTTP/1.1 200 OK (text/javascript)
249	10.327316000	208.117.229.108	192.168.1.23	HTTP	618	HTTP/1.1 200 OK (text/javascript)
251	10.334377000	192.168.1.23	208.117.229.180	HTTP	1040	GET /results?search_query=lego&hishe HTTP/1.1
261	10.797538000	192.168.1.23	208.117.229.104	HTTP	416	GET /yts/cssbin/www-results-vflhkoq9u.css HTTP/1.1
269	10.825881000	208.117.229.104	192.168.1.23	HTTP	1359	HTTP/1.1 200 OK (text/css)

Wireshark 1.10.7 (v1.10.7-0-g6b931a1 from master-1.10)

Filter: http

No.	Time	Source	Destination	Protocol	Length	Info
284	10.895669000	208.117.229.180	192.168.1.23	TCP	59	[TCP Previous segment not captured] http > 57422 [PSH, ACK] Seq=42975 Ack=1696 win=32640 Len=5[Reass
300	11.184808000	192.168.1.23	208.117.229.152	HTTP	424	GET /vi/HOQXXNYSHRO/mqdefault.jpg HTTP/1.1
301	11.185047000	192.168.1.23	208.117.229.152	HTTP	424	GET /vi/HgITyYxUHyQ/mqdefault.jpg HTTP/1.1
302	11.185200000	192.168.1.23	208.117.229.152	HTTP	424	GET /vi/kw4UmadPZnw/mqdefault.jpg HTTP/1.1
303	11.185350000	192.168.1.23	208.117.229.152	HTTP	424	GET /vi/Liv7xs2cvqg/mqdefault.jpg HTTP/1.1
304	11.186128000	192.168.1.23	208.117.229.104	HTTP	402	GET /yts/jsbin/www-search-ads-vflsTog5i.js HTTP/1.1
316	11.231721000	208.117.229.104	192.168.1.23	HTTP	730	HTTP/1.1 200 OK (text/javascript)
337	11.269684000	208.117.229.152	192.168.1.23	HTTP	748	HTTP/1.1 200 OK (JPEG JFIF image)
339	11.270044000	192.168.1.23	208.117.229.152	HTTP	424	GET /vi/V3mz5PPmGmc/mqdefault.jpg HTTP/1.1
347	11.285099000	208.117.229.152	192.168.1.23	HTTP	886	HTTP/1.1 200 OK (JPEG JFIF image)
349	11.285662000	192.168.1.23	208.117.229.152	HTTP	424	GET /vi/kmr3j7tr4w0/mqdefault.jpg HTTP/1.1
362	11.309796000	208.117.229.152	192.168.1.23	HTTP	1211	HTTP/1.1 200 OK (JPEG JFIF image)
364	11.312766000	208.117.229.152	192.168.1.23	HTTP	245	HTTP/1.1 200 OK (JPEG JFIF image)
373	11.332041000	208.117.229.152	192.168.1.23	HTTP	1376	HTTP/1.1 200 OK (JPEG JFIF image)
384	11.350359000	208.117.229.152	192.168.1.23	HTTP	642	HTTP/1.1 200 OK (JPEG JFIF image)
393	11.551843000	192.168.1.23	173.194.116.143	HTTP	658	GET /csi?v=2&s=youtube&action=results&e=913434,916611,922520,923341,937505,944403,945005&y_t=col&
394	11.612527000	173.194.116.143	192.168.1.23	HTTP	377	HTTP/1.1 204 No Content
400	12.554862000	192.168.1.23	208.117.229.104	HTTP	405	GET /yts/jsbin/www-en_US-vf1Hs5yb2/results.js HTTP/1.1
401	12.581202000	208.117.229.104	192.168.1.23	HTTP	1471	HTTP/1.1 200 OK (text/javascript)
458	14.247618000	192.168.1.23	208.117.229.180	HTTP	925	GET /watch?v=HOQXXNYSHRO HTTP/1.1
468	15.014063000	192.168.1.23	208.117.229.104	HTTP	413	GET /yts/cssbin/www-watch-transcript-vflp-Zp3x.css HTTP/1.1
474	15.030413000	208.117.229.104	192.168.1.23	HTTP	1033	HTTP/1.1 200 OK (text/css)
475	15.030872000	192.168.1.23	208.117.229.145	HTTP	419	GET /crossdomain.xml HTTP/1.1
476	15.030989000	192.168.1.23	208.117.229.145	HTTP	416	GET /generate_204 HTTP/1.1
478	15.045093000	208.117.229.145	192.168.1.23	HTTP	634	HTTP/1.1 200 OK (text/x-cross-domain-policy)
480	15.049457000	208.117.229.145	192.168.1.23	HTTP	194	HTTP/1.1 204 No Content
518	15.132522000	208.117.229.180	192.168.1.23	HTTP	1319	HTTP/1.1 200 OK (text/html)
531	15.364716000	192.168.1.23	208.117.229.183	HTTP	434	GET /gen_204?attributionpartner=HISHEdotcom HTTP/1.1
533	15.373938000	192.168.1.23	208.117.229.104	HTTP	435	GET /yts/img/icn_loading_animated-vflff1mjj.gif HTTP/1.1
539	15.389327000	208.117.229.104	192.168.1.23	HTTP	837	HTTP/1.1 200 OK (GIF89a)
548	15.447338000	208.117.229.183	192.168.1.23	HTTP	454	HTTP/1.1 204 No Content
564	16.670459000	192.168.1.23	208.117.229.104	HTTP	473	GET /yts/swfbin/player-vfl_hhewn/iv3_module.swf HTTP/1.1
565	16.670922000	192.168.1.23	208.117.229.180	HTTP	866	GET /crossdomain.xml HTTP/1.1
566	16.671217000	192.168.1.23	208.117.229.145	HTTP	467	GET /crossdomain.xml HTTP/1.1
585	16.713898000	208.117.229.180	192.168.1.23	HTTP	650	HTTP/1.1 200 OK (text/x-cross-domain-policy)

File: "E:\FER\VisUs\3 dz\zad2.pcapng" 13 M... Packets: 13960 - Displayed: 175 (1,3%) - Profile: Default

Wireshark 1.10.7 (v1.10.7-0-g6b931a1 from master-1.10)

Filter: http

No.	Time	Source	Destination	Protocol	Length	Info
587	16.715187000	208.117.229.145	192.168.1.23	HTTP	634	HTTP/1.1 200 OK (text/x-cross-domain-policy)
596	16.726950000	192.168.1.23	208.117.229.187	HTTP	1024	GET /stream_204?vfs=0.000:134:134::1&el=detailpage&ns=yt&view=0.000:640:390&event=streamingstats&sc
696	16.902476000	208.117.229.187	192.168.1.23	HTTP	429	HTTP/1.1 204 No Content
738	16.976167000	192.168.1.23	208.117.229.180	HTTP	1037	GET /ptracking?plid=AAT6je0EktZqkmbD&pltype=content&video_id=HOQXXNYSHRO&ptchn=HCph-_jLba_9atyCZJPLQ
739	16.976486000	192.168.1.23	208.117.229.152	HTTP	410	GET /vi/Liv7xs2cvqg/default.jpg HTTP/1.1
740	16.976688000	192.168.1.23	208.117.229.152	HTTP	410	GET /vi/4thvBNZdGcQ/default.jpg HTTP/1.1
741	16.977377000	192.168.1.23	208.117.229.152	HTTP	410	GET /vi/QeCDYsZuho/default.jpg HTTP/1.1
742	16.977585000	192.168.1.23	208.117.229.152	HTTP	410	GET /vi/n30SAWnzY14/default.jpg HTTP/1.1
746	16.979039000	192.168.1.23	208.117.229.145	HTTP	1019	GET /videoplayback?c=web&len=3014494&cpn=SmjfiH5QvAL4vupg&cver=as3&dur=187.732&expire=1401411680&fe
749	16.980589000	208.117.229.104	192.168.1.23	HTTP	803	HTTP/1.1 200 OK (application/x-shockwave-flash)
750	16.984699000	192.168.1.23	208.117.229.145	HTTP	1020	GET /videoplayback?c=web&len=7616785&cpn=SmjfiH5QvAL4vupg&cver=as3&dur=187.626&expire=1401411680&fe
754	17.028264000	192.168.1.23	208.117.229.104	HTTP	391	GET /yts/jsbin/www-en_US-vf1Hs5yb2/watch.js HTTP/1.1
758	17.040252000	208.117.229.152	192.168.1.23	HTTP	611	HTTP/1.1 200 OK (JPEG JFIF image)
760	17.040727000	192.168.1.23	208.117.229.152	HTTP	410	GET /vi/CurPYa6sIp4/default.jpg HTTP/1.1
764	17.046924000	208.117.229.152	192.168.1.23	HTTP	769	HTTP/1.1 200 OK (JPEG JFIF image)
765	17.047198000	192.168.1.23	208.117.229.152	HTTP	410	GET /vi/UGP8FVXN9NE/default.jpg HTTP/1.1
769	17.054338000	208.117.229.152	192.168.1.23	HTTP	975	HTTP/1.1 200 OK (JPEG JFIF image)
770	17.054672000	192.168.1.23	208.117.229.152	HTTP	410	GET /vi/99cf0Nyn7qs/default.jpg HTTP/1.1
792	17.094871000	208.117.229.104	192.168.1.23	HTTP	1069	HTTP/1.1 200 OK (text/javascript)
796	17.103046000	208.117.229.152	192.168.1.23	HTTP	1349	HTTP/1.1 200 OK (JPEG JFIF image)
797	17.103708000	208.117.229.180	192.168.1.23	HTTP	441	HTTP/1.1 204 No Content
818	17.139520000	208.117.229.152	192.168.1.23	HTTP	477	HTTP/1.1 200 OK (JPEG JFIF image)
823	17.145268000	208.117.229.152	192.168.1.23	HTTP	181	HTTP/1.1 200 OK (JPEG JFIF image)
828	17.151785000	208.117.229.152	192.168.1.23	HTTP	262	HTTP/1.1 200 OK (JPEG JFIF image)
970	17.403585000	192.168.1.23	208.117.229.180	HTTP	902	GET /annotations_invideo?cap_hist=1&video_id=HOQXXNYSHRO HTTP/1.1
1021	17.493306000	192.168.1.23	208.117.229.104	HTTP	402	GET /yts/jsbin/www-en_US-vf1Hs5yb2/watch_transcript.js HTTP/1.1
1023	17.493584000	192.168.1.23	208.117.229.84	HTTP	406	GET /yts/jsbin/www-en_US-vf1Hs5yb2/watch_missilecommand.js HTTP/1.1
1101	17.631892000	192.168.1.23	173.194.116.143	HTTP	913	GET /csi?v=2&s=youtube&action=watch_watch?ad&plid=AAT6je0EktZqkmbD&fmt=134&y_t=flash&cpn=SmjfiH5Qv
1149	17.715375000	208.117.229.180	192.168.1.23	HTTP/XML	1167	HTTP/1.1 200 OK
1163	17.728468000	208.117.229.104	192.168.1.23	HTTP	606	HTTP/1.1 200 OK (text/javascript)
1166	17.731067000	208.117.229.84	192.168.1.23	HTTP	1218	HTTP/1.1 200 OK (text/javascript)
1229	17.846327000	192.168.1.23	208.117.229.187	HTTP	1302	GET /api/stats/playback?plid=AAT6je0EktZqkmbD&ei=dHmHU7uXj_P1gbb94CwDg&cb=Firefox&rtn=2&ns=yt&cbv
1230	17.847246000	192.168.1.23	208.117.229.152	HTTP	447	GET /crossdomain.xml HTTP/1.1
1238	17.853547000	192.168.1.23	173.194.70.156	HTTP	380	GET /tag/js/gpt.js HTTP/1.1
1275	17.922185000	173.194.116.143	192.168.1.23	HTTP	377	HTTP/1.1 204 No Content

File: "E:\FER\VisUs\3 dz\zad2.pcapng" 13 M... Packets: 13960 - Displayed: 175 (1,3%) - Profile: Default

Wireshark 1.10.7 (v1.10.7-0-g6b931a1 from master-1.10)

File Edit View Go Capture Analyze Statistics Telephony Tools Internals Help

Filter: http Expression... Clear Apply Save

No.	Time	Source	Destination	Protocol	Length	Info
1297	17.961578000	192.168.1.23	208.117.229.108	HTTP	889	GET /crossdomain.xml HTTP/1.1
1306	17.964528000	192.168.1.23	173.194.35.176	HTTP	718	GET /js/bg/bcr1_JHsmtBAKR1Crk1_uwBn2NqGHTsJL0mibveye0.js HTTP/1.1
1348	18.025436000	208.117.229.145	192.168.1.23	HTTP	686	HTTP/1.1 200 OK (application/octet-stream)
1362	18.055129000	208.117.229.152	192.168.1.23	HTTP	560	HTTP/1.1 200 OK (text/x-cross-domain-policy)
1392	18.100704000	173.194.70.156	192.168.1.23	HTTP	1474	HTTP/1.1 200 OK (text/javascript)
1396	18.106695000	208.117.229.187	192.168.1.23	HTTP	495	HTTP/1.1 204 No Content
1407	18.124865000	173.194.116.143	192.168.1.23	HTTP	377	[TCP Retransmission] HTTP/1.1 204 No Content
1422	18.149007000	192.168.1.23	208.117.229.152	HTTP	460	GET /vi/13diUNlTh-M/mqdefault.jpg HTTP/1.1
1437	18.167151000	208.117.229.108	192.168.1.23	HTTP	678	HTTP/1.1 200 OK (text/x-cross-domain-policy)
1441	18.174447000	173.194.35.176	192.168.1.23	HTTP	1366	HTTP/1.1 200 OK (text/javascript)
1482	18.242065000	208.117.229.152	192.168.1.23	HTTP	560	[TCP Retransmission] HTTP/1.1 200 OK (text/x-cross-domain-policy)
1540	18.342040000	192.168.1.23	208.117.229.108	HTTP	1027	GET /s?plid=AAT6je0EkTZqkmbD&ctp=1&el=detailpage&ns=yt&asv=3&yttk=1&et=0.146&st=0.146&cpn=SmjfiH5QvA
1560	18.377107000	192.168.1.23	208.117.229.145	HTTP	1024	GET /videoplayback?c=web&clen=3014494&cpn=SmjfiH5QvAL4vupg&cver=as3&dur=187.732&expire=1401411680&fe
1642	18.514390000	208.117.229.108	192.168.1.23	HTTP	495	HTTP/1.1 204 No Content
1728	18.662573000	208.117.229.152	192.168.1.23	HTTP	1344	HTTP/1.1 200 OK (JPEG JFIF image)
1790	18.766697000	192.168.1.23	208.117.229.187	HTTP	1255	GET /api/stats/watchtime?rti=2&plid=AAT6je0EkTZqkmbD&ei=dHmHU7uXJ_P1igbb94CwDg&cbr=Firefox&docid=HOQ
1965	19.046148000	208.117.229.187	192.168.1.23	HTTP	495	HTTP/1.1 204 No Content
2113	19.255356000	208.117.229.187	192.168.1.23	HTTP	495	[TCP Retransmission] HTTP/1.1 204 No Content
2221	19.440727000	208.117.229.145	192.168.1.23	HTTP	686	HTTP/1.1 200 OK (application/octet-stream)
2234	19.459130000	192.168.1.23	208.117.229.145	HTTP	1024	GET /videoplayback?c=web&clen=3014494&cpn=SmjfiH5QvAL4vupg&cver=as3&dur=187.732&expire=1401411680&fe
2490	19.871888000	192.168.1.23	208.117.229.145	HTTP	1026	GET /videoplayback?c=web&clen=7616785&cpn=SmjfiH5QvAL4vupg&cver=as3&dur=187.626&expire=1401411680&fe
2716	20.232437000	192.168.1.23	208.117.229.180	HTTP	1320	POST /watch_fragments_ajax?v=HOQxxNYSHR0&tr=time&frags=guide HTTP/1.1 (application/x-www-form-urlencoded)
2867	20.435875000	208.117.229.145	192.168.1.23	HTTP	1274	[TCP Retransmission] HTTP/1.1 200 OK (application/octet-stream)
2902	20.493750000	208.117.229.180	192.168.1.23	HTTP	1139	HTTP/1.1 200 OK (application/json)
3594	21.770837000	208.117.229.145	192.168.1.23	HTTP	786	HTTP/1.1 200 OK (application/octet-stream)
3647	21.866606000	192.168.1.23	208.117.229.145	HTTP	1024	GET /videoplayback?c=web&clen=3014494&cpn=SmjfiH5QvAL4vupg&cver=as3&dur=187.732&expire=1401411680&fe
3775	22.095799000	192.168.1.23	208.117.229.187	HTTP	282	POST /api/stats/atr?cos=windows&ei=dHmHU7uXJ_P1igbb94CwDg&el=detailpage&c=WEB&len=187.626&q=lego%20h
3958	22.427295000	208.117.229.187	192.168.1.23	HTTP	495	HTTP/1.1 204 No Content
4032	22.561409000	192.168.1.23	208.117.229.145	HTTP	1026	GET /videoplayback?c=web&clen=7616785&cpn=SmjfiH5QvAL4vupg&cver=as3&dur=187.626&expire=1401411680&fe
4283	22.935246000	192.168.1.23	208.117.229.187	HTTP	1136	GET /stream_204?ei=dHmHU7uXJ_P1igbb94CwDg&vfs=6.512:135:134:134:m&el=detailpage&ns=yt&view=6.512:640
4471	23.213650000	192.168.1.23	208.117.229.145	HTTP	974	GET /videoplayback?clen=14498627&cpn=SmjfiH5QvAL4vupg&dur=187.626&expire=1401411680&fexp=913434%2C91
4522	23.291629000	208.117.229.187	192.168.1.23	HTTP	429	HTTP/1.1 204 No Content
4605	23.438107000	192.168.1.23	208.117.229.145	HTTP	1025	GET /videoplayback?c=web&clen=3014494&cpn=SmjfiH5QvAL4vupg&cver=as3&dur=187.732&expire=1401411680&fe
4678	23.560259000	208.117.229.145	192.168.1.23	TCP	1252	[TCP Previous segment not captured] [TCP segment of a reassembled PDU]
4947	23.960200000	208.117.229.145	192.168.1.23	HTTP	686	HTTP/1.1 200 OK (application/octet-stream)

File: "E:\FER\VisUsh3 dz\zad2.pcapng" 13 M... Packets: 13960 - Displayed: 175 (1.3%) - Profile: Default

21:01 29.5.2014.