

Лабораторная работа №2

ИСТ-13
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Задание 1. Загрузка файла трассировки http

Nice-httplog

No.	Time	Source	Destination	Protocol	Tcp info
1	0.000000	192.168.1.122	18.9.22.169	HTTP	882 GET /img/MET_logo.gif HTTP/1.1
2	0.091557	18.9.22.169	192.168.1.122	TCP	1414 80 → 64123 [PSH, ACK] Seq=1 Ack=737 Win=6792 Len=1348 TSval=2386688720 TSecr=549868767 [TCP PDU reassembled in 4]
3	0.091645	192.168.1.122	18.9.22.169	TCP	66 64123 → 80 [ACK] Seq=737 Ack=1349 Win=65495 Len=0 TSval=5498688754 TSecr=2386688720
4	0.092632	18.9.22.169	192.168.1.122	HTTP	1991 HTTP/1.1 200 OK (GIF/89a)
5	0.092655	192.168.1.122	18.9.22.169	TCP	66 64123 → 80 [ACK] Seq=737 Ack=1874 Win=65535 Len=0 TSval=5498688859 TSecr=2386688720
6	0.420971	192.168.1.122	18.9.22.169	HTTP	882 GET /img/MET_logo.gif HTTP/1.1
7	0.437057	18.9.22.169	192.168.1.122	HTTP	312 HTTP/1.1 3xx See modified
8	0.513715	192.168.1.122	18.9.22.169	TCP	66 64123 → 80 [ACK] Seq=1563 Ack=2120 Win=65535 Len=0 TSval=5498782657 TSecr=2386689147
9	0.532086	192.168.1.122	18.9.22.169	HTTP	711 GET /favicon.ico HTTP/1.1
10	0.623756	18.9.22.169	192.168.1.122	TCP	1414 80 → 64123 [PSH, ACK] Seq=2120 Ack=2808 Win=8263 Len=1348 TSval=2386690252 TSecr=5498782657 [TCP PDU reassembled in 27]
11	0.623966	192.168.1.122	18.9.22.169	TCP	66 64123 → 80 [ACK] Seq=2200 Ack=3468 Win=65495 Len=0 TSval=5498783731 TSecr=2386690252
12	0.624148	18.9.22.169	192.168.1.122	TCP	1434 80 → 64123 [ACK] Seq=3468 Ack=2200 Win=8263 Len=1368 TSval=2386690252 TSecr=5498783731 [TCP PDU reassembled in 27]
13	0.624748	18.9.22.169	192.168.1.122	TCP	1434 80 → 64123 [ACK] Seq=6136 Ack=2200 Win=8263 Len=1368 TSval=2386690252 TSecr=5498783731 [TCP PDU reassembled in 27]
14	0.624792	192.168.1.122	18.9.22.169	TCP	66 64123 → 80 [ACK] Seq=2200 Ack=6204 Win=65522 Len=0 TSval=5498783731 TSecr=2386690252
15	0.625105	18.9.22.169	192.168.1.122	TCP	1434 80 → 64123 [ACK] Seq=6204 Ack=2200 Win=8263 Len=1368 TSval=2386690252 TSecr=5498783731 [TCP PDU reassembled in 27]
16	0.625328	192.168.1.122	18.9.22.169	TCP	66 64123 → 80 [ACK] Seq=2200 Ack=7572 Win=65535 Len=0 TSval=5498783731 TSecr=2386690252
17	0.638191	18.9.22.169	192.168.1.122	TCP	1434 80 → 64123 [ACK] Seq=7572 Ack=2200 Win=8263 Len=1368 TSval=2386690253 TSecr=5498783731 [TCP PDU reassembled in 27]
18	0.638692	18.9.22.169	192.168.1.122	TCP	1434 80 → 64123 [ACK] Seq=9840 Ack=2200 Win=8263 Len=1368 TSval=2386690253 TSecr=5498783731 [TCP PDU reassembled in 27]
19	0.638714	192.168.1.122	18.9.22.169	TCP	66 64123 → 80 [ACK] Seq=2200 Ack=10380 Win=64983 Len=0 TSval=5498783731 TSecr=2386690253
20	0.638763	18.9.22.169	192.168.1.122	TCP	1434 80 → 64123 [ACK] Seq=18308 Ack=2200 Win=8263 Len=1368 TSval=2386690253 TSecr=5498783731 [TCP PDU reassembled in 27]
21	0.639184	18.9.22.169	192.168.1.122	TCP	1434 80 → 64123 [ACK] Seq=11676 Ack=2200 Win=8263 Len=1368 TSval=2386690254 TSecr=5498783731 [TCP PDU reassembled in 27]
22	0.639213	192.168.1.122	18.9.22.169	TCP	66 64123 → 80 [ACK] Seq=2200 Ack=13844 Win=64983 Len=0 TSval=5498783735 TSecr=2386690253
23	0.645358	18.9.22.169	192.168.1.122	TCP	1434 80 → 64123 [ACK] Seq=13844 Ack=2200 Win=8263 Len=1368 TSval=2386690254 TSecr=5498783731 [TCP PDU reassembled in 27]
24	0.646268	18.9.22.169	192.168.1.122	TCP	1434 80 → 64123 [ACK] Seq=14612 Ack=2200 Win=8263 Len=1368 TSval=2386690254 TSecr=5498783731 [TCP PDU reassembled in 27]
25	0.646298	192.168.1.122	18.9.22.169	TCP	66 64123 → 80 [ACK] Seq=2200 Ack=13780 Win=64983 Len=0 TSval=5498783731 TSecr=2386690254

```
> Frame 1398: 66 bytes by wire (52B bits), 66 bytes captured (52B bits) on eth0
> Ethernet II, Src: CiscoLinxsys, Dest: Apple, Encapsulated Length: 60
> Internet Protocol Version 4, Src: 192.168.1.122, Port: 192.168.1.122
> Transmission Control Protocol, Src Port: 80, Dst Port: 64123, Seq: 62085, Ack: 8846, Len: 0
```

Topic / Item	Count	Average	Min Val	Max Val	Rate (ms)	Percent	Burst Rate	Burst Start
Packet Lengths	1398	875,20	54	1514	0,0438	100%	0,7600	25,796

Протокол	Процент пакетов	Пакеты	Процент байтов	Байты	Бит/с
Frame	100.0	1398	100.0	1223530	306 k
HTTP Request Packets	98	HTTP Response Packets	98		

Задание 2. Изучение трассировки запроса и ответа

http

No.

Time

Source

Destination

Protocol

Length

Info

1

0.000000

192.168.1.122

128.95.155.197

HTTP

802

GET /img/NTT_logo.gif HTTP/1.1

4

0.005322

192.168.1.122

192.168.1.122

HTTP

591

HTTP/1.1 200 OK (GIF89a)

6

0.429071

192.168.1.122

192.168.1.122

HTTP

892

GET /img/NTT_logo.gif HTTP/1.1

9

0.537857

192.168.1.122

192.168.1.122

HTTP

312

HTTP/1.1 304 Not modified

9

0.532006

192.168.1.122

192.168.1.122

HTTP

711

GET /favicon.ico HTTP/1.1

27

0.651540

192.168.1.122

192.168.1.122

HTTP

170

HTTP/1.1 200 OK (image/x-icon)

34

24.364800

192.168.1.122

128.95.155.197

HTTP

750

GET / HTTP/1.1

45

24.398356

192.168.1.122

128.95.155.197

HTTP

797

GET /static/portal_css/UM200wvmarketing200theme/css/jquery.accessiblenav-cachekey3297.css HTTP/1.1

63

24.425904

128.95.155.197

192.168.1.122

HTTP

1352

HTTP/1.1 200 OK (text/css)

67

24.427750

192.168.1.122

128.95.155.197

HTTP

789

GET /static/portal_css/UM200wvmarketing200theme/blueprintscreen-cachekey8595.css HTTP/1.1

72

24.440471

192.168.1.122

128.95.155.197

HTTP

792

GET /static/portal_css/UM200wvmarketing200theme/cachekey8398.css HTTP/1.1

79

24.440445

192.168.1.122

128.95.155.197

HTTP

772

GET /static/portal_javascripts/UM200wvmarketing200theme/jquery-cachekey1826.js HTTP/1.1

81

24.470914

192.168.1.122

128.95.155.197

HTTP

787

GET /static/portal_javascripts/UM200wvmarketing200theme/resources/jquery-ui.min-cachekey3200.js HTTP/1.1

95

24.472207

192.168.1.122

128.95.155.197

HTTP

700

GET /static/portal_javascripts/UM200wvmarketing200theme/scriptsweather-cachekey6736.js HTTP/1.1

173

24.608648

128.95.155.197

192.168.1.122

HTTP

1234

HTTP/1.1 200 OK (application/x-javascript)

185

24.661842

192.168.1.122

128.95.155.197

HTTP

793

GET /static/portal_javascripts/UM200wvmarketing200theme/scriptsjquery.accessiblenav-cachekey1830.js HTTP/1.1

195

24.702508

128.95.155.197

192.168.1.122

HTTP

887

HTTP/1.1 200 OK (text/html)

197

24.704354

192.168.1.122

128.95.155.197

HTTP

784

GET /static/portal_javascripts/UM200wvmarketing200theme/scriptsstankt-jquery-cachekey3095.js HTTP/1.1

202

24.715114

128.95.155.197

192.168.1.122

HTTP

1050

HTTP/1.1 200 OK (text/css)

204

24.717050

192.168.1.122

128.95.155.197

HTTP

786

GET /static/portal_javascripts/UM200wvmarketing200theme/scriptshomepage-tabs-cachekey5578.js HTTP/1.1

217

24.740461

192.168.1.122

128.95.155.197

HTTP

961

HTTP/1.1 200 OK (text/css)

242

24.814540

128.95.155.197

192.168.1.122

HTTP

94

HTTP/1.1 200 OK (application/x-javascript)

249

24.878221

128.95.155.197

192.168.1.122

HTTP

432

HTTP/1.1 200 OK (application/x-javascript)

276

24.893143

128.95.155.197

192.168.1.122

HTTP

737

HTTP/1.1 200 OK (application/x-javascript)

351

25.875268

128.95.155.197

192.168.1.122

HTTP

955

HTTP/1.1 200 OK (application/x-javascript)

Frame 1: 802 bytes on wire (6416 bits), 802 bytes captured (6416 bits) on 0

Ethernet II, Src: Apple_8c:16:12 (08:00:27:08:12:20), Dst: CiscoLinksys_e19:8d (00:16:16:0e:3c:e8d)

Internet Protocol Version 4, Src: 192.168.1.122, Dst: 128.95.155.197

Transmission Control Protocol, Src Port: 64123, Dst Port: 80, Seq: 1, Ack: 1, Len: 736

Hypertext Transfer Protocol,

0000 00 16 06 c3 e9 b0 10 9a dd ac 26 08 00 00 05 001k E-

0001 00 14 0c 8d 40 00 00 00 00 34 08 01 7a 12 89 1 8...

0002 00 a9 fa 75 80 00 00 11 72 a9 07 ff e4 00 18 00 0...

0003 00 ff ff b0 76 00 00 01 00 08 0a 26 c5 64 ff 8e 3f...

0004 00 e4 47 54 20 ff 69 67 2f 4d 40 54 ff 8e 3f 8...

0005 00 67 6f 2e 67 69 66 20 48 54 50 2f 31 2e 31 2...

0006 00 04 48 6f 73 74 3a 20 77 77 77 77 66 69 64 7...

0007 00 64 75 6d 8a 43 6f 6e 6e 63 74 69 6f 6e 3a 3...

0008 00 60 65 6f 70 24 61 6c 69 70 6d 04 04 63 61 63...

0009 00 68 65 2d 43 6f 6e 74 72 6f 6e 3a 20 6d 61 70...

0010 00 61 67 65 3d 30 0d 0a 05 73 65 72 2d 21 67 06...

0011 00 74 3a 2d 46 7a 69 6e 6c 61 2f 31 28 08 20 6...

0012 00 4d 61 63 69 6e 74 6f 71 6f 30 20 49 6a 74 6c...

0013 00 20 4d 61 63 20 5f 50 50 52 31 30 5f 37 3f 33...

0014 00 20 4d 70 70 6c 65 57 65 63 4d 69 74 2f 3f 33...

0015 00 3e 2e 31 20 28 48 54 4d 4c 2c 20 6c 69 69 6...

0016 00 65 20 47 65 6f 6f 20 20 43 68 6d 6f 66 65 2f...

0017 00 32 30 2e 31 31 31 31 31 31 31 31 31 31 31 31...

0018 00 72 69 2f 3f 35 35 35 35 31 31 6d 04 61 63 61...

0019 00 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20...

0020 00 6c 69 69 63 61 74 69 6f 6e 2f 70 70 74 6d 6c...

0021 00 64 6c 6c 6c 61 70 76 69 63 61 2f 2f 2f 2f 2f...

0022 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0023 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0024 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0025 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0026 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0027 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0028 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0029 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0030 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0031 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0032 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0033 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0034 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0035 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0036 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0037 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0038 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0039 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0040 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0041 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0042 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0043 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0044 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0045 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0046 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0047 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0048 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0049 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0050 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0051 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0052 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0053 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0054 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0055 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0056 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0057 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0058 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0059 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0060 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0061 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0062 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0063 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0064 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0065 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0066 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0067 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0068 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0069 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0070 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0071 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0072 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0073 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0074 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0075 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0076 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0077 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0078 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0079 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0080 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0081 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0082 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0083 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0084 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0085 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0086 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0087 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0088 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0089 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0090 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0091 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0092 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0093 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0094 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0095 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0096 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0097 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0098 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0099 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0100 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0101 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0102 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0103 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0104 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0105 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0106 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0107 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0108 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0109 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0110 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0111 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0112 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0113 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0114 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0115 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0116 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0117 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0118 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0119 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0120 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0121 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0122 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0123 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0124 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0125 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0126 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0127 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0128 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0129 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0130 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0131 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0132 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0133 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0134 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0135 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0136 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0137 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0138 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0139 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0140 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0141 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0142 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0143 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0144 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0145 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0146 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0147 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0148 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0149 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0150 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0151 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0152 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0153 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0154 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0155 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0156 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0157 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0158 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0159 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0160 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0161 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0162 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0163 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0164 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0165 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0166 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0167 00 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c 6c...

0168 00 6c

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	192.168.1.122	192.168.1.122	HTTP	800	GET /img/MIT_logo.gif HTTP/1.1
2	0.001557	18.9.22.169	192.168.1.122	TCP	1414	80 → 64123 [PSH, ACK] Seq=1 Ack=737 Win=6792 Len=1348 TSV=2386688720 TSecr=549868767 [TCP PDU reassembled in 4]
3	0.001645	192.168.1.122	18.9.22.169	TCP	66	64123 → 80 [ACK] Seq=737 Ack=1349 Win=65495 Len=0 TSV=549868858 TSecr=2386688720
4	0.002632	18.9.22.169	192.168.1.122	HTTP	591	HTTP/1.1 200 OK (GIF89a)
5	0.002655	192.168.1.122	18.9.22.169	TCP	66	64123 → 80 [ACK] Seq=737 Ack=1674 Win=65535 Len=0 TSV=549868859 TSecr=2386688720
6	0.429071	192.168.1.122	18.9.22.169	HTTP	892	GET /img/MIT_logo.gif HTTP/1.1
7	0.517057	18.9.22.169	192.168.1.122	HTTP	312	HTTP/1.1 304 Not Modified
8	0.517915	192.168.1.122	18.9.22.169	TCP	66	64123 → 80 [ACK] Seq=1563 Ack=2120 Win=65535 Len=0 TSV=549878267 TSecr=2386689147
9	0.512086	192.168.1.122	18.9.22.169	HTTP	711	GET /favicon.ico HTTP/1.1
10	0.623756	18.9.22.169	192.168.1.122	TCP	1414	80 → 64123 [PSH, ACK] Seq=2120 Ack=2208 Win=8263 Len=1348 TSV=2386688252 TSecr=549878280 [TCP PDU reassembled in 27]
11	0.623986	192.168.1.122	18.9.22.169	TCP	66	64123 → 80 [ACK] Seq=2208 Ack=2460 Win=65495 Len=0 TSV=549878371 TSecr=2386689252
12	0.624140	18.9.22.169	192.168.1.122	TCP	1434	80 → 64123 [ACK] Seq=3468 Ack=2208 Win=8263 Len=1368 TSV=2386688252 TSecr=549878280 [TCP PDU reassembled in 27]
13	0.624748	18.9.22.169	192.168.1.122	TCP	1434	80 → 64123 [ACK] Seq=4836 Ack=2208 Win=8263 Len=1368 TSV=2386688252 TSecr=549878280 [TCP PDU reassembled in 27]
14	0.624792	192.168.1.122	18.9.22.169	TCP	1434	80 → 64123 [ACK] Seq=7572 Ack=2208 Win=8263 Len=1368 TSV=2386688253 TSecr=549878280 [TCP PDU reassembled in 27]
15	0.625185	18.9.22.169	192.168.1.122	TCP	1434	80 → 64123 [ACK] Seq=6204 Ack=2208 Win=8263 Len=1368 TSV=2386688252 TSecr=549878280 [TCP PDU reassembled in 27]
16	0.626328	192.168.1.122	18.9.22.169	TCP	66	64123 → 80 [ACK] Seq=2208 Ack=7572 Win=65535 Len=0 TSV=549878373 TSecr=2386688252
17	0.638763	18.9.22.169	192.168.1.122	TCP	1434	80 → 64123 [ACK] Seq=7572 Ack=2208 Win=8263 Len=1368 TSV=2386688253 TSecr=549878280 [TCP PDU reassembled in 27]
18	0.638952	18.9.22.169	192.168.1.122	TCP	1434	80 → 64123 [ACK] Seq=8940 Ack=2208 Win=8263 Len=1368 TSV=2386688253 TSecr=549878280 [TCP PDU reassembled in 27]
19	0.638978	192.168.1.122	18.9.22.169	TCP	66	64123 → 80 [ACK] Seq=2208 Ack=18308 Win=65493 Len=0 TSV=549878377 TSecr=2386689253
20	0.638763	18.9.22.169	192.168.1.122	TCP	1434	80 → 64123 [ACK] Seq=18308 Ack=2208 Win=8263 Len=1368 TSV=2386688253 TSecr=549878280 [TCP PDU reassembled in 27]
21	0.639184	18.9.22.169	192.168.1.122	TCP	1434	80 → 64123 [ACK] Seq=11676 Ack=2208 Win=8263 Len=1368 TSV=2386688254 TSecr=549878280 [TCP PDU reassembled in 27]
22	0.639213	192.168.1.122	18.9.22.169	TCP	66	64123 → 80 [ACK] Seq=2208 Ack=13844 Win=65493 Len=0 TSV=549878385 TSecr=2386689253
23	0.645350	18.9.22.169	192.168.1.122	TCP	1434	80 → 64123 [ACK] Seq=13844 Ack=2208 Win=8263 Len=1368 TSV=2386688254 TSecr=549878280 [TCP PDU reassembled in 27]
24	0.646280	18.9.22.169	192.168.1.122	TCP	1434	80 → 64123 [ACK] Seq=14412 Ack=2208 Win=8263 Len=1368 TSV=2386688254 TSecr=549878280 [TCP PDU reassembled in 27]
25	0.646290	192.168.1.122	18.9.22.169	TCP	66	64123 → 80 [ACK] Seq=2208 Ack=15780 Win=65493 Len=0 TSV=549878391 TSecr=2386689254

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	192.168.1.122	192.168.1.122	HTTP	800	GET /img/MIT_logo.gif HTTP/1.1
2	0.001557	18.9.22.169	192.168.1.122	TCP	1414	80 → 64123 [PSH, ACK] Seq=1 Ack=737 Win=6792 Len=1348 TSV=2386688720 TSecr=549868767 [TCP PDU reassembled in 4]
3	0.001645	192.168.1.122	18.9.22.169	TCP	66	64123 → 80 [ACK] Seq=737 Ack=1349 Win=65495 Len=0 TSV=549868858 TSecr=2386688720
4	0.002632	18.9.22.169	192.168.1.122	HTTP	591	HTTP/1.1 200 OK (GIF89a)
5	0.002655	192.168.1.122	18.9.22.169	TCP	66	64123 → 80 [ACK] Seq=737 Ack=1674 Win=65535 Len=0 TSV=549868859 TSecr=2386688720
6	0.429071	192.168.1.122	18.9.22.169	HTTP	892	GET /img/MIT_logo.gif HTTP/1.1
7	0.517057	18.9.22.169	192.168.1.122	HTTP	312	HTTP/1.1 304 Not Modified
8	0.517915	192.168.1.122	18.9.22.169	TCP	66	64123 → 80 [ACK] Seq=1563 Ack=2120 Win=65535 Len=0 TSV=549878267 TSecr=2386689147
9	0.512086	192.168.1.122	18.9.22.169	HTTP	711	GET /favicon.ico HTTP/1.1
10	0.623756	18.9.22.169	192.168.1.122	TCP	1414	80 → 64123 [PSH, ACK] Seq=2120 Ack=2208 Win=8263 Len=1348 TSV=2386688252 TSecr=549878280 [TCP PDU reassembled in 27]
11	0.623986	192.168.1.122	18.9.22.169	TCP	66	64123 → 80 [ACK] Seq=2208 Ack=2460 Win=65495 Len=0 TSV=549878371 TSecr=2386689252
12	0.624140	18.9.22.169	192.168.1.122	TCP	1434	80 → 64123 [ACK] Seq=3468 Ack=2208 Win=8263 Len=1368 TSV=2386688252 TSecr=549878280 [TCP PDU reassembled in 27]
13	0.624748	18.9.22.169	192.168.1.122	TCP	1434	80 → 64123 [ACK] Seq=4836 Ack=2208 Win=8263 Len=1368 TSV=2386688252 TSecr=549878280 [TCP PDU reassembled in 27]
14	0.624792	192.168.1.122	18.9.22.169	TCP	1434	80 → 64123 [ACK] Seq=7572 Ack=2208 Win=8263 Len=1368 TSV=2386688253 TSecr=549878280 [TCP PDU reassembled in 27]
15	0.625185	18.9.22.169	192.168.1.122	TCP	1434	80 → 64123 [ACK] Seq=6204 Ack=2208 Win=8263 Len=1368 TSV=2386688252 TSecr=549878280 [TCP PDU reassembled in 27]
16	0.626328	192.168.1.122	18.9.22.169	TCP	66	64123 → 80 [ACK] Seq=2208 Ack=7572 Win=65535 Len=0 TSV=549878373 TSecr=2386688252
17	0.638763	18.9.22.169	192.168.1.122	TCP	1434	80 → 64123 [ACK] Seq=7572 Ack=2208 Win=8263 Len=1368 TSV=2386688253 TSecr=549878280 [TCP PDU reassembled in 27]
18	0.638952	18.9.22.169	192.168.1.122	TCP	1434	80 → 64123 [ACK] Seq=8940 Ack=2208 Win=8263 Len=1368 TSV=2386688253 TSecr=549878280 [TCP PDU reassembled in 27]
19	0.638978	192.168.1.122	18.9.22.169	TCP	66	64123 → 80 [ACK] Seq=2208 Ack=18308 Win=65493 Len=0 TSV=549878377 TSecr=2386689253
20	0.638763	18.9.22.169	192.168.1.122	TCP	1434	80 → 64123 [ACK] Seq=18308 Ack=2208 Win=8263 Len=1368 TSV=2386688253 TSecr=549878280 [TCP PDU reassembled in 27]
21	0.639184	18.9.22.169	192.168.1.122	TCP	1434	80 → 64123 [ACK] Seq=11676 Ack=2208 Win=8263 Len=1368 TSV=2386688254 TSecr=549878280 [TCP PDU reassembled in 27]
22	0.639213	192.168.1.122	18.9.22.169	TCP	66	64123 → 80 [ACK] Seq=2208 Ack=13844 Win=65493 Len=0 TSV=549878385 TSecr=2386689253
23	0.645350	18.9.22.169	192.168.1.122	TCP	1434	80 → 64123 [ACK] Seq=13844 Ack=2208 Win=8263 Len=1368 TSV=2386688254 TSecr=549878280 [TCP PDU reassembled in 27]
24	0.646280	18.9.22.169	192.168.1.122	TCP	1434	80 → 64123 [ACK] Seq=14412 Ack=2208 Win=8263 Len=1368 TSV=2386688254 TSecr=549878280 [TCP PDU reassembled in 27]
25	0.646290	192.168.1.122	18.9.22.169	TCP	66	64123 → 80 [ACK] Seq=2208 Ack=15780 Win=65493 Len=0 TSV=549878391 TSecr=2386689254

> Frame 1: 802 bytes on wire (6416 bits), 802 bytes captured (6416 bits)
 > Ethernet II, Src: Apple_8c:6c:16 (08:0a:dd:ac:16:26), Dst: CiscoLinksys_e3:e9:bd (00:16:b6:eb:e9:bd)
 > Internet Protocol Version 4, Src: 192.168.1.122, Dst: 18.9.22.169
 > Transmission Control Protocol, Src Port: 64123, Dst Port: 80, Seq: 1, Ack: 1, Len: 736
 > Hypertext Transfer Protocol

> GET /img/MIT_logo.gif HTTP/1.1\r\n
 Host: www.mit.edu\r\n
 Connection: keep-alive\r\n
 Cache-Control: max-age=0\r\n
 User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_7_3) AppleWebKit/536.11 (KHTML, like Gecko) Chrome/20.0.1132.57 Safari/536.11\r\n
 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8\r\n
 Accept-Encoding: gzip,deflate,sdch\r\n
 Accept-Language: en-us,en;q=0.8\r\n
 Accept-Charset: ISO-8859-1,utf-8;q=0.7,*q=0.3\r\n
 > [Cookie: __gads=ID=8ad65dc86381f8d7:T=1303597795:S=ALNI_MYTf61fAaVdjXmft_V1_01Q1AyCg; __utma=242276382.1429768394.1303597797.1329188360.1342416347.7; __utmb=242276382.2.10.1342416347; __utmc=242276382;\r\n
 [Response in frame: 4]
 [Full request URI: http://www.mit.edu/img/MIT_logo.gif]

Строка **HTTP/1.1 200 OK** указывает на успешную обработку запроса, где **HTTP/1.1** — версия протокола, а **200 OK** — код состояния, означающий, что запрос выполнен корректно, и сервер возвращает запрошенные данные.

Заголовок **Date: Mon, 16 Jul 2012 05:28:04 GMT** содержит дату и время формирования ответа в формате GMT. Это помогает клиенту синхронизировать время и учитывать кэширование.

Поле **Server:** **Apache/1.3.41** **(Unix)** **mod_ssl/2.8.31**

OpenSSL/0.9.8j сообщает информацию о сервере, включая его программное обеспечение (Apache версии 1.3.41), операционную систему (Unix), а также используемые модули (**mod_ssl** и **OpenSSL** с указанием версий). Эти данные могут быть полезны для диагностики или оценки безопасности сервера.

Заголовки **Cache-Control: max-age=81125** и **Expires: Tue, 17 Jul 2012 04:00:09 GMT** управляют кэшированием на стороне клиента. **max-age=81125** означает, что ответ может храниться в кэше 81125 секунд (около 22.5 часов), а **Expires** указывает точную дату и время, после которых данные считаются устаревшими.

Поле **Last-Modified: Mon, 16 Jul 2012 04:00:09 GMT** показывает, когда ресурс был последний раз изменён. Клиент может использовать этот заголовок для условных запросов, например, с **If-Modified-Since**, чтобы избежать повторной загрузки неизменившихся данных.

Уникальный идентификатор ресурса содержится в **ETag: "10eb008a-5f2-500391c9"**. Он позволяет клиенту проверять актуальность кэшированной версии, отправляя заголовок **If-None-Match**. Если **ETag** совпадает, сервер может ответить **304 Not Modified**, что сокращает трафик.

Заголовок **Accept-Ranges: bytes** указывает, что сервер поддерживает частичные запросы, то есть клиент может загружать файл по частям (например, для возобновления прерванной загрузки).

Content-Length: 1522 сообщает размер тела ответа в байтах (1522 байта), что помогает клиенту контролировать процесс загрузки.

Поле **Connection: close** означает, что сервер закроет соединение после отправки ответа. Это противоположно значению **keep-alive**, при котором соединение остаётся открытым для последующих запросов.

Наконец, **Content-Type: image/gif** определяет тип возвращаемых данных — в данном случае это изображение в формате GIF. Браузер использует эту информацию для корректного отображения контента.

Задание 3. Кэширование контента

6	9.429071	192.168.1.122	18.9.22.169	HTTP	892	GET	/img/MIT_logo.gif	HTTP/1.1
7	9.517857	18.9.22.169	192.168.1.122	HTTP	312	HTTP/1.1	304	Not Modified
9	9.532006	192.168.1.122	18.9.22.169	HTTP	711	GET	/favicon.ico	HTTP/1.1
27	9.651450	18.9.22.169	192.168.1.122	HTTP	170	HTTP/1.1	200	OK (image/x-icon)
34	24.364808	192.168.1.122	128.95.155.197	HTTP	750	GET	/ HTTP/1.1	
45	24.398536	192.168.1.122	128.95.155.197	HTTP	797	GET	/static/portal_css/Un%20Marketing%20Theme/cssjquery.accessiblenav-cachekey3297.css	HTTP/1.1
63	24.425904	128.95.155.197	192.168.1.122	HTTP	1352	HTTP/1.1	200	OK (text/css)
67	24.427750	192.168.1.122	128.95.155.197	HTTP	789	GET	/static/portal_css/Un%20Marketing%20Theme/blueprintscreen-cachekey8595.css	HTTP/1.1
73	24.440773	192.168.1.122	128.95.155.197	HTTP	792	GET	/static/portal_css/Un%20Marketing%20Theme/csshomepage_header-cachekey0398.css	HTTP/1.1
79	24.448445	192.168.1.122	128.95.155.197	HTTP	772	GET	/static/portal_javascripts/Un%20Marketing%20Theme/jquery-cachekey1826.js	HTTP/1.1
91	24.470914	192.168.1.122	128.95.155.197	HTTP	787	GET	/static/portal_javascripts/Un%20Marketing%20Theme/resourcejquery-ui.min-cachekey3200.js	HTTP/1.1
95	24.472207	192.168.1.122	128.95.155.197	HTTP	780	GET	/static/portal_javascripts/Un%20Marketing%20Theme/scriptsweather-cachekey6736.js	HTTP/1.1
123	24.660146	128.95.155.197	192.168.1.122	HTTP	1234	HTTP/1.1	200	OK (application/x-javascript)
175	24.661842	192.168.1.122	128.95.155.197	HTTP	793	GET	/static/portal_javascripts/Un%20Marketing%20Theme/scriptsjquery.accessiblenav-cachekey1030.js	HTTP/1.1
173	24.702598	128.95.155.197	192.168.1.122	HTTP	887	HTTP/1.1	200	OK (text/html)
197	24.704354	192.168.1.122	128.95.155.197	HTTP	784	GET	/static/portal_javascripts/Un%20Marketing%20Theme/scriptsmtg-jquery-cachekey3095.js	HTTP/1.1
202	24.716114	128.95.155.197	192.168.1.122	HTTP	1058	HTTP/1.1	200	OK (text/css)
204	24.717050	192.168.1.122	128.95.155.197	HTTP	786	GET	/static/portal_javascripts/Un%20Marketing%20Theme/scriptshomepage-tabs-cachekey3578.js	HTTP/1.1
217	24.749941	128.95.155.197	192.168.1.122	HTTP	961	HTTP/1.1	200	OK (text/css)
242	24.814450	128.95.155.197	192.168.1.122	HTTP	94	HTTP/1.1	200	OK (application/x-javascript)
269	24.878221	128.95.155.197	192.168.1.122	HTTP	432	HTTP/1.1	200	OK (application/x-javascript)
278	24.898143	128.95.155.197	192.168.1.122	HTTP	737	HTTP/1.1	200	OK (application/x-javascript)
351	25.075260	128.95.155.197	192.168.1.122	HTTP	955	HTTP/1.1	200	OK (application/x-javascript)

> Frame 6: 892 bytes on wire (7136 bits), 892 bytes captured (7136 bits)

> Ethernet II, Src: Apple_ac:6c:26 (18:9a:dd:ac:6c:26), Dst: CiscoLinksys_e3:e9:8d (00:16:b6:e3:e9:8d)

> Internet Protocol Version 4, Src: 192.168.1.122, Dst: 18.9.22.169

> Transmission Control Protocol, Src Port: 64123, Dst Port: 80, Seq: 737, Ack: 1874, Len: 826

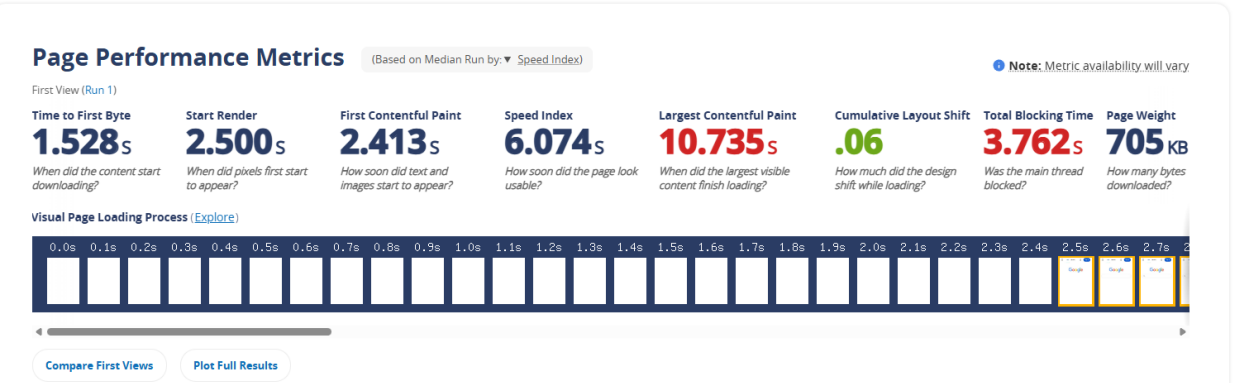
> Hypertext Transfer Protocol

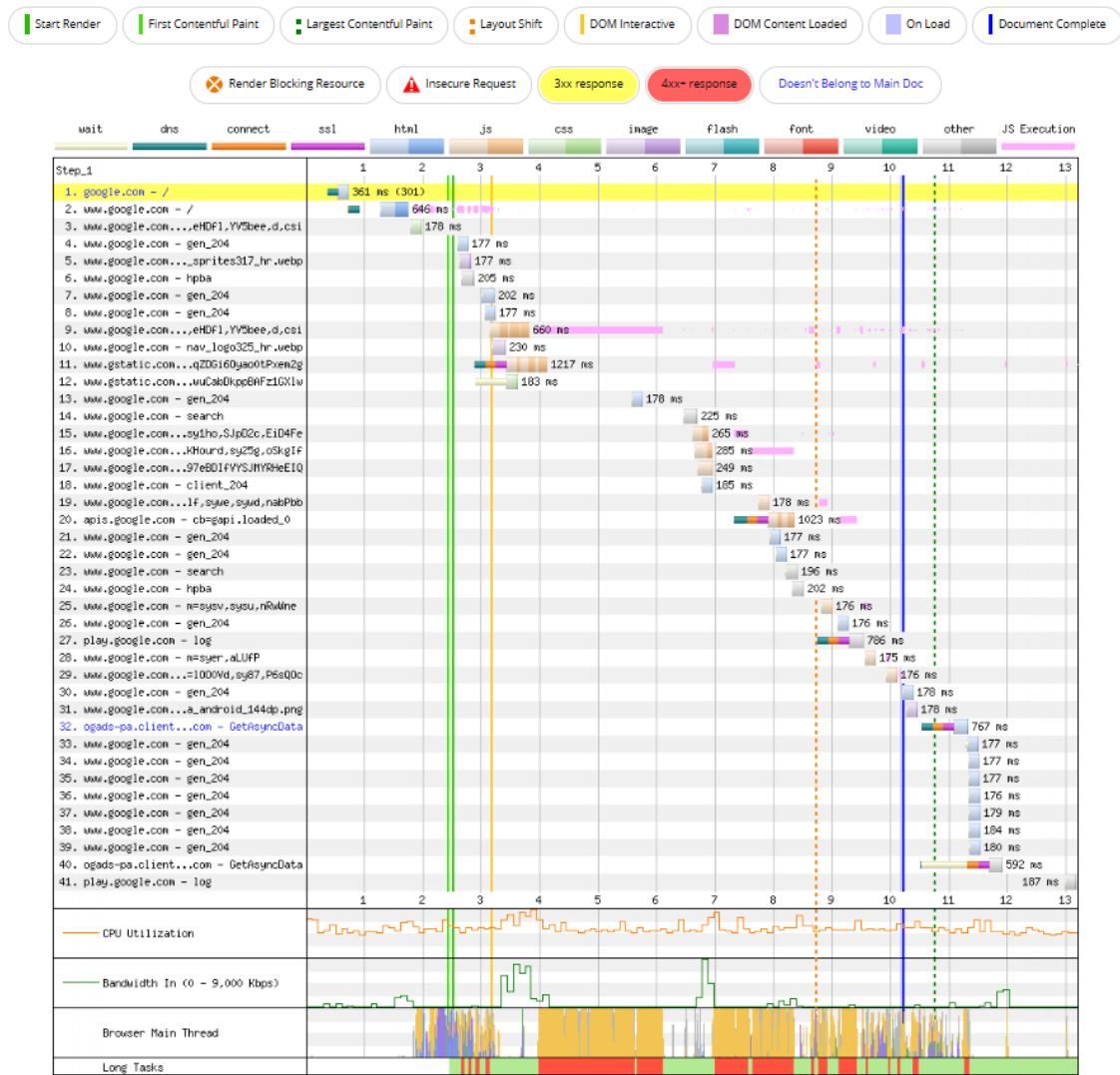
> GET /img/MIT_logo.gif HTTP/1.1\r\nHost: www.mit.edu\r\nConnection: keep-alive\r\nCache-Control: max-age=0\r\nUser-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_7_3) AppleWebKit/536.11 (KHTML, like Gecko) Chrome/20.0.1132.57 Safari/536.1\r\nAccept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8\r\nAccept-Encoding: gzip,deflate,sdch\r\nAccept-Language: en-US,en;q=0.8\r\nAccept-Charset: ISO-8859-1,utf-8;q=0.7,*;q=0.3\r\nCookie: __gads=ID=8ad65dc86381f8d7:T=1303597795:S=ALNI_MYTF61FAaVdjXmft_V1_0lQ1AyCg; __utma=242276382.1429768304.1303597797.1\r\nIf-None-Match: "10eb008a-5f2-500391c9"\r\nIf-Modified-Since: Mon, 16 Jul 2012 04:00:09 GMT\r\n\r\n[Response in frame: 7]
[Full request URI: http://www.mit.edu/img/MIT_logo.gif]

01a0 4c 61 6e 67 75 61 67 65 3a 20 65 6e 2d 55 :
01b0 65 6e 3b 71 3d 30 2e 38 0d 0a 41 63 63 65 :
01c0 2d 43 68 61 72 73 65 74 3a 20 49 53 4f 2d :
01d0 35 39 2d 31 2c 75 74 66 2d 38 3b 71 3d 30 :
01e0 2c 2a 3b 71 3d 30 2e 33 0d 0a 43 6f 6b 6b :
01f0 3a 20 5f 5f 67 61 64 73 3d 49 44 3d 38 61 :
0200 35 64 63 38 36 33 38 31 66 38 64 37 3a 54 :
0210 33 30 33 35 39 37 37 39 35 3a 53 3d 41 4c :
0220 5f 4d 59 54 66 36 69 46 41 61 56 64 6a 4a :
0230 66 54 5f 56 31 5f 30 31 51 31 41 79 43 67 :
0240 5f 5f 75 74 6d 61 3d 32 34 32 32 37 36 33 :
0250 2e 31 34 32 39 37 36 38 33 30 34 2e 31 33 :
0260 35 39 37 37 39 37 2e 31 33 32 39 31 30 38 :
0270 30 2e 31 33 34 32 34 31 36 33 34 37 2e 37 :
0280 5f 5f 75 74 6d 62 3d 32 34 32 32 37 36 33 :
0290 2e 32 2e 31 30 2e 31 33 34 32 34 31 36 33 :
02a0 3b 20 5f 5f 75 74 6d 63 3d 32 34 32 32 37 :
02b0 38 32 3b 20 5f 5f 75 74 6d 7a 3d 32 34 32 :
02c0 36 33 38 32 2e 31 33 31 37 33 33 37 37 :
02d0 35 2e 36 2e 75 74 6d 63 73 72 3d 62 69 6e :
02e0 75 74 6d 63 6e 3d 28 6f 72 67 61 6e 69 :
02f0 7c 75 74 6d 63 6d 64 3d 6f 72 67 61 6e 69 :
0300 75 74 6d 63 74 72 3d 6d 69 74 25 32 30 6f :

В седьмой строке трассировки представлен HTTP-запрос на получение изображения MIT_logo.gif. В этом запросе указаны стандартные заголовки, такие как Host, определяющий домен запроса, User-Agent, описывающий используемый браузер, и Accept, обозначающий ожидаемые типы данных (в данном случае изображения). Также присутствует Referer, указывающий на источник запроса — главную страницу сайта MIT. Заголовок If-Modified-Since отсутствует, так как это первый запрос к ресурсу после очистки кэша браузера, поэтому сервер возвращает полный контент изображения.

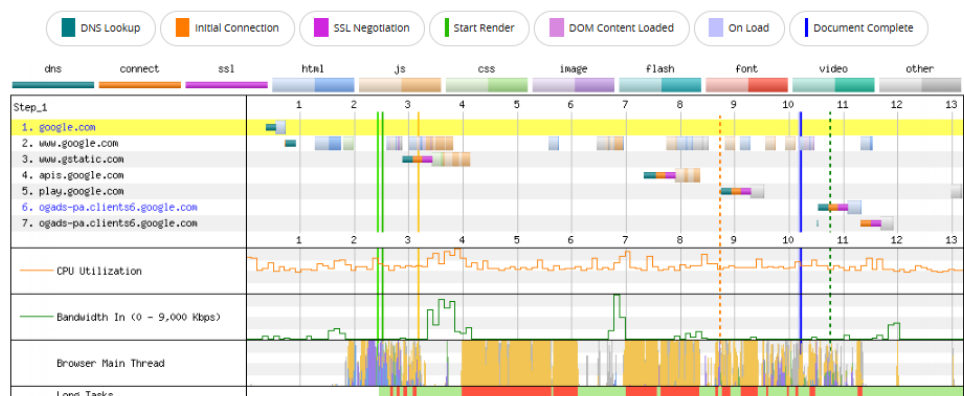
Задание 4. Сложные страницы





terfall • [View all Images](#) • [View HTTP/2 Dependency Graph](#) • [Filmstrip](#)

Connection View



Request Details

Before Start Render Before On Load After On Load 3xx Response 4xx Response

Request Details												
#	Resource	Content Type	Priority	Request Start	DNS Lookup	Initial Connection	SSL Negotiation	Time to First Byte	Content Download	Bytes Downloaded	CPU Time	Error/Stat Code
1	https://google.com/	text/html	Highest	0.547 s	182 ms	-	-	179 ms	-	-	-	301
2	https://www.google.com/	text/html	Highest	1.266 s	174 ms	-	-	262 ms	210 ms	54.0 KB	777 ms	200
3	https://www.google.c...ee.d.cs?cb=72947179	text/css	Highest	1.791 s	-	-	-	175 ms	3 ms	0.7 KB	-	200
4	https://www.google.c...nt=qush&oi=89978449	text/html	Lowest	2.595 s	-	-	-	177 ms	-	-	-	204
5	https://www.google.c...x_sorites317_hr.webp	Image/webp	High	2.634 s	-	-	-	175 ms	2 ms	1.7 KB	-	200
6	https://www.google.c...kFHUN7K7sQl-9kCBU_l	text/plain	High	2.66 s	-	-	-	196 ms	9 ms	0.1 KB	-	200
7	https://www.google.c...nWB7lq5NoPw_at2Qs_11	text/html	Low	3.009 s	-	-	-	202 ms	-	-	-	204
8	https://www.google.c...&wh=512&oi=89978449	text/html	Lowest	3.061 s	-	-	-	177 ms	-	-	-	204
9	https://www.google.c...ee.d.cs?cb=72947179	text/javascript	Low	3.141 s	-	-	-	182 ms	478 ms	332.1 KB	2634 ms	200
10	https://www.google.c.../nav_logo325_hr.webp	Image/webp	Low	3.18 s	-	-	-	224 ms	6 ms	5.0 KB	-	200
11	https://www.gstatic...OHqZDGIS0va0tPxem2g	text/javascript	Low	3.427 s	174 ms	172 ms	185 ms	183 ms	503 ms	79.4 KB	557 ms	200
12	https://www.gstatic...xxwuCabDko0BAFz1GxIw	text/css	Highest	3.427 s	-	-	-	179 ms	4 ms	2.2 KB	-	200
13	https://www.google.c...0135321&oi=89978449	text/html	Lowest	5.57 s	-	-	-	178 ms	-	-	-	204
14	https://www.google.c...1748210135932&dpr=3	application/json	High	6.466 s	-	-	-	205 ms	20 ms	21.0 KB	-	200
15	https://www.google.c...e?cb=72947179&xjs=s3	text/javascript	High	6.614 s	-	-	-	175 ms	90 ms	93.7 KB	292 ms	200
16	https://www.google.c...?cb=72947179&xjs=s3	text/javascript	High	6.656 s	-	-	-	224 ms	61 ms	64.9 KB	768 ms	200
17	https://www.google.c...MYRHeEIQ?cb=72947179	text/javascript	High	6.699 s	-	-	-	247 ms	2 ms	0.9 KB	-	200
18	https://www.google.c...w_at2Qs&oi=89978449	text/html	Low	6.764 s	-	-	-	185 ms	-	-	-	204
19	https://www.google.c...b?cb=72947179&xjs=s3	text/javascript	High	7.742 s	-	-	-	174 ms	4 ms	3.2 KB	122 ms	200
20	https://apis.google...ZOW/cb=gapi.loaded_0	text/javascript	Low	7.897 s	208 ms	171 ms	184 ms	177 ms	283 ms	38.1 KB	293 ms	200
21	https://www.google.c...0137678&oi=89978449	text/html	Lowest	7.934 s	-	-	-	177 ms	-	-	-	204
22	https://www.google.c...0137783&oi=89978449	text/html	Lowest	8.035 s	-	-	-	177 ms	-	-	-	204
23	https://www.google.c...eb-iso&xssi=t&dpr=3	application/json	High	8.204 s	-	-	-	193 ms	3 ms	0.3 KB	-	200

Информация, полученная в ходе тестирования веб-ресурса через сервисы вроде PageSpeed или WebPageTest, имеет большую ценность для веб-разработки, поскольку помогает улучшать как техническую, так и пользовательскую сторону сайта.

Во-первых, она позволяет определить, насколько быстро загружается сайт, особенно для пользователей с медленным интернет-соединением или на мобильных устройствах. Это важно, потому что скорость загрузки напрямую влияет на пользовательский опыт: если страница долго не открывается, пользователь может просто уйти.

Во-вторых, тестирование выявляет конкретные проблемы: слишком большие изображения, блокирующие скрипты, неэффективный CSS и т.д. Эти данные позволяют разработчику оптимизировать структуру и ресурсы сайта, сделав его быстрее и стабильнее.

Также результаты влияют на SEO — поисковые системы, такие как Google, учитывают скорость и оптимизацию страниц при ранжировании. Чем выше

производительность сайта, тем выше вероятность, что он будет находиться на лучших позициях в поисковой выдаче.

Кроме того, отчеты содержат рекомендации по улучшению производительности и безопасности сайта, что помогает соблюдать современные стандарты и best practices веб-разработки.

Таким образом, такие тесты — это мощный инструмент для анализа, отладки и повышения качества веб-проекта.