**МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ**

**НАВЧАЛЬНО-НАУКОВИЙ КОМПЛЕКС**

**«ІНСТИТУТ ПРИКЛАДНОГО СИСТЕМНОГО АНАЛІЗУ»**

**НАЦІОНАЛЬНОГО ТЕХНІЧНОГО УНІВЕРСИТЕТУ УКРАЇНИ**

**«КИЇВСЬКИЙ ПОЛІТЕХНІЧНИЙ ІНСТИТУТ ІМЕНІ ІГОРЯ СІКОРСЬКОГО»**

**КАФЕДРА МАТЕМАТИЧНИХ МЕТОДІВ СИСТЕМНОГО АНАЛІЗУ**

**Практична робота №2**

**з курсу «Комп'ютерні мережі»**

**Виконав студент 3 курсу**

**групи КА-71**

**Чоловський С. О.**

**Прийняв Кухарєв С.О.**

**Київ – 2020 р.**

No. Time Source Destination Protocol Length Info

95 27.445317 192.168.0.102 128.119.245.12 HTTP 442 GET /wireshark-labs/HTTP-wireshark-file1.html HTTP/

1.1

Frame 95: 442 bytes on wire (3536 bits), 442 bytes captured (3536 bits) on interface \Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E},

id 0

Ethernet II, Src: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f), Dst: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0)

Internet Protocol Version 4, Src: 192.168.0.102, Dst: 128.119.245.12

Transmission Control Protocol, Src Port: 53605, Dst Port: 80, Seq: 1, Ack: 1, Len: 388

Hypertext Transfer Protocol

GET /wireshark-labs/HTTP-wireshark-file1.html HTTP/1.1\r\n

Host: gaia.cs.umass.edu\r\n

User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:70.0) Gecko/20100101 Firefox/70.0\r\n

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,\*/\*;q=0.8\r\n

Accept-Language: uk-UA,uk;q=0.8,en-US;q=0.5,en;q=0.3\r\n

Accept-Encoding: gzip, deflate\r\n

Connection: keep-alive\r\n

Upgrade-Insecure-Requests: 1\r\n

\r\n

[Full request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file1.html]

[HTTP request 1/2]

[Response in frame: 109]

[Next request in frame: 110]

No. Time Source Destination Protocol Length Info

109 27.584662 128.119.245.12 192.168.0.102 HTTP 540 HTTP/1.1 200 OK (text/html)

Frame 109: 540 bytes on wire (4320 bits), 540 bytes captured (4320 bits) on interface

\Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E}, id 0

Ethernet II, Src: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0), Dst: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f)

Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.0.102

Transmission Control Protocol, Src Port: 80, Dst Port: 53605, Seq: 1, Ack: 389, Len: 486

Hypertext Transfer Protocol

HTTP/1.1 200 OK\r\n

Date: Mon, 27 Apr 2020 18:22:32 GMT\r\n

Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/5.4.16 mod\_perl/2.0.11 Perl/v5.16.3\r\n

Last-Modified: Mon, 27 Apr 2020 05:59:02 GMT\r\n

ETag: "80-5a43f6973698a"\r\n

Accept-Ranges: bytes\r\n

Content-Length: 128\r\n

Keep-Alive: timeout=5, max=100\r\n

Connection: Keep-Alive\r\n

Content-Type: text/html; charset=UTF-8\r\n

\r\n

[HTTP response 1/2]

[Time since request: 0.139345000 seconds]

[Request in frame: 95]

[Next request in frame: 110]

[Next response in frame: 111]

[Request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file1.html]

File Data: 128 bytes

Line-based text data: text/html (4 lines)

1. **1.1 обидва**
2. **Accept-Language: uk-UA,uk;q=0.8,en-US;q=0.5,en;q=0.3\r\n українська та англійська**
3. **192.168.0.102 128.119.245 сервер та комп’ютер відповідно**
4. **200ОК**
5. **Last-Modified: Mon, 27 Apr 2020 05:59:02 GMT\r\n**
6. **Content-Length: 128\r\n**
7. **Ні**

No. Time Source Destination Protocol Length Info

51 5.888854 192.168.0.102 128.119.245.12 HTTP 442 GET /wireshark-labs/HTTP-wireshark-file1.html HTTP/

1.1

Frame 51: 442 bytes on wire (3536 bits), 442 bytes captured (3536 bits) on interface \Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E},

id 0

Ethernet II, Src: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f), Dst: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0)

Internet Protocol Version 4, Src: 192.168.0.102, Dst: 128.119.245.12

Transmission Control Protocol, Src Port: 53611, Dst Port: 80, Seq: 1, Ack: 1, Len: 388

Hypertext Transfer Protocol

GET /wireshark-labs/HTTP-wireshark-file1.html HTTP/1.1\r\n

Host: gaia.cs.umass.edu\r\n

User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:70.0) Gecko/20100101 Firefox/70.0\r\n

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,\*/\*;q=0.8\r\n

Accept-Language: uk-UA,uk;q=0.8,en-US;q=0.5,en;q=0.3\r\n

Accept-Encoding: gzip, deflate\r\n

Connection: keep-alive\r\n

Upgrade-Insecure-Requests: 1\r\n

\r\n

[Full request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file1.html]

[HTTP request 1/3]

[Response in frame: 72]

[Next request in frame: 73]

No. Time Source Destination Protocol Length Info

72 6.019664 128.119.245.12 192.168.0.102 HTTP 540 HTTP/1.1 200 OK (text/html)

Frame 72: 540 bytes on wire (4320 bits), 540 bytes captured (4320 bits) on interface \Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E},

id 0

Ethernet II, Src: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0), Dst: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f)

Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.0.102

Transmission Control Protocol, Src Port: 80, Dst Port: 53611, Seq: 1, Ack: 389, Len: 486

Hypertext Transfer Protocol

HTTP/1.1 200 OK\r\n

Date: Mon, 27 Apr 2020 18:25:22 GMT\r\n

Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/5.4.16 mod\_perl/2.0.11 Perl/v5.16.3\r\n

Last-Modified: Mon, 27 Apr 2020 05:59:02 GMT\r\n

ETag: "80-5a43f6973698a"\r\n

Accept-Ranges: bytes\r\n

Content-Length: 128\r\n

Keep-Alive: timeout=5, max=100\r\n

Connection: Keep-Alive\r\n

Content-Type: text/html; charset=UTF-8\r\n

\r\n

[HTTP response 1/3]

[Time since request: 0.130810000 seconds]

[Request in frame: 51]

[Next request in frame: 73]

[Next response in frame: 74]

[Request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file1.html]

File Data: 128 bytes

Line-based text data: text/html (4 lines)

<html>\n

Congratulations. You've downloaded the file \n

http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file1.html!\n

</html>\n

No. Time Source Destination Protocol Length Info

73 6.043495 192.168.0.102 128.119.245.12 HTTP 334 GET /favicon.ico HTTP/1.1

Frame 73: 334 bytes on wire (2672 bits), 334 bytes captured (2672 bits) on interface \Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E},

id 0

Ethernet II, Src: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f), Dst: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0)

Internet Protocol Version 4, Src: 192.168.0.102, Dst: 128.119.245.12

Transmission Control Protocol, Src Port: 53611, Dst Port: 80, Seq: 389, Ack: 487, Len: 280

Hypertext Transfer Protocol

GET /favicon.ico HTTP/1.1\r\n

Host: gaia.cs.umass.edu\r\n

User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:70.0) Gecko/20100101 Firefox/70.0\r\n

Accept: image/webp,\*/\*\r\n

Accept-Language: uk-UA,uk;q=0.8,en-US;q=0.5,en;q=0.3\r\n

Accept-Encoding: gzip, deflate\r\n

Connection: keep-alive\r\n

\r\n

[Full request URI: http://gaia.cs.umass.edu/favicon.ico]

[HTTP request 2/3]

[Prev request in frame: 51]

[Response in frame: 74]

[Next request in frame: 79]

No. Time Source Destination Protocol Length Info

74 6.174571 128.119.245.12 192.168.0.102 HTTP 538 HTTP/1.1 404 Not Found (text/html)

Frame 74: 538 bytes on wire (4304 bits), 538 bytes captured (4304 bits) on interface \Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E},

id 0

Ethernet II, Src: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0), Dst: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f)

Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.0.102

Transmission Control Protocol, Src Port: 80, Dst Port: 53611, Seq: 487, Ack: 669, Len: 484

Hypertext Transfer Protocol

HTTP/1.1 404 Not Found\r\n

Date: Mon, 27 Apr 2020 18:25:22 GMT\r\n

Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/5.4.16 mod\_perl/2.0.11 Perl/v5.16.3\r\n

Content-Length: 209\r\n

Keep-Alive: timeout=5, max=99\r\n

Connection: Keep-Alive\r\n

Content-Type: text/html; charset=iso-8859-1\r\n

\r\n

[HTTP response 2/3]

[Time since request: 0.131076000 seconds]

[Prev request in frame: 51]

[Prev response in frame: 72]

[Request in frame: 73]

[Next request in frame: 79]

[Next response in frame: 81]

[Request URI: http://gaia.cs.umass.edu/favicon.ico]

File Data: 209 bytes

Line-based text data: text/html (7 lines)

<!DOCTYPE HTML PUBLIC "-//IETF//DTD HTML 2.0//EN">\n

<html><head>\n

<title>404 Not Found</title>\n

</head><body>\n

<h1>Not Found</h1>\n

<p>The requested URL /favicon.ico was not found on this server.</p>\n

</body></html>\n

No. Time Source Destination Protocol Length Info

79 9.755136 192.168.0.102 128.119.245.12 HTTP 553 GET /wireshark-labs/HTTP-wireshark-file1.html HTTP/

1.1

Frame 79: 553 bytes on wire (4424 bits), 553 bytes captured (4424 bits) on interface \Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E},

id 0

Ethernet II, Src: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f), Dst: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0)

Internet Protocol Version 4, Src: 192.168.0.102, Dst: 128.119.245.12

Transmission Control Protocol, Src Port: 53611, Dst Port: 80, Seq: 669, Ack: 971, Len: 499

Hypertext Transfer Protocol

GET /wireshark-labs/HTTP-wireshark-file1.html HTTP/1.1\r\n

Host: gaia.cs.umass.edu\r\n

User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:70.0) Gecko/20100101 Firefox/70.0\r\n

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,\*/\*;q=0.8\r\n

Accept-Language: uk-UA,uk;q=0.8,en-US;q=0.5,en;q=0.3\r\n

Accept-Encoding: gzip, deflate\r\n

Connection: keep-alive\r\n

Upgrade-Insecure-Requests: 1\r\n

If-Modified-Since: Mon, 27 Apr 2020 05:59:02 GMT\r\n

If-None-Match: "80-5a43f6973698a"\r\n

Cache-Control: max-age=0\r\n

\r\n

[Full request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file1.html]

[HTTP request 3/3]

[Prev request in frame: 73]

[Response in frame: 81]

No. Time Source Destination Protocol Length Info

81 9.931372 128.119.245.12 192.168.0.102 HTTP 292 HTTP/1.1 304 Not Modified

Frame 81: 292 bytes on wire (2336 bits), 292 bytes captured (2336 bits) on interface \Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E},

id 0

Ethernet II, Src: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0), Dst: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f)

Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.0.102

Transmission Control Protocol, Src Port: 80, Dst Port: 53611, Seq: 971, Ack: 1168, Len: 238

Hypertext Transfer Protocol

HTTP/1.1 304 Not Modified\r\n

Date: Mon, 27 Apr 2020 18:25:26 GMT\r\n

Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/5.4.16 mod\_perl/2.0.11 Perl/v5.16.3\r\n

Connection: Keep-Alive\r\n

Keep-Alive: timeout=5, max=98\r\n

ETag: "80-5a43f6973698a"\r\n

\r\n

[HTTP response 3/3]

[Time since request: 0.176236000 seconds]

[Prev request in frame: 73]

[Prev response in frame: 74]

[Request in frame: 79]

[Request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file1.html]

1. **Ні**
2. **Так**
3. **Mon, 27 Apr 2020 05:59:02 GMT\r\n**
4. **304 NOT Modified**

No. Time Source Destination Protocol Length Info

14 1.643941 192.168.0.102 193.109.246.67 HTTP 431 GET /foto/edin\_inform.jpg HTTP/1.1

Frame 14: 431 bytes on wire (3448 bits), 431 bytes captured (3448 bits) on interface \Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E},

id 0

Ethernet II, Src: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f), Dst: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0)

Internet Protocol Version 4, Src: 192.168.0.102, Dst: 193.109.246.67

Transmission Control Protocol, Src Port: 55346, Dst Port: 80, Seq: 1, Ack: 1, Len: 377

Hypertext Transfer Protocol

No. Time Source Destination Protocol Length Info

403 2.097652 193.109.246.67 192.168.0.102 HTTP 1296 HTTP/1.1 200 OK (JPEG JFIF image)

Frame 403: 1296 bytes on wire (10368 bits), 1296 bytes captured (10368 bits) on interface

\Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E}, id 0

Ethernet II, Src: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0), Dst: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f)

Internet Protocol Version 4, Src: 193.109.246.67, Dst: 192.168.0.102

Transmission Control Protocol, Src Port: 80, Dst Port: 55346, Seq: 409163, Ack: 378, Len: 1242

[282 Reassembled TCP Segments (410404 bytes): #16(362), #17(1460), #18(1460), #20(1460), #22(1460), #23(1460), #24(1460), #25(1460),

#27(1460), #28(1460), #30(1460), #31(1460), #32(1460), #33(1460), #35(1460), #36(1460), #37(1460), #38(1460]

Hypertext Transfer Protocol

JPEG File Interchange Format

No. Time Source Destination Protocol Length Info

405 2.730410 192.168.0.102 193.109.246.67 HTTP 332 GET /favicon.ico HTTP/1.1

Frame 405: 332 bytes on wire (2656 bits), 332 bytes captured (2656 bits) on interface

\Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E}, id 0

Ethernet II, Src: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f), Dst: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0)

Internet Protocol Version 4, Src: 192.168.0.102, Dst: 193.109.246.67

Transmission Control Protocol, Src Port: 55346, Dst Port: 80, Seq: 378, Ack: 410405, Len: 278

Hypertext Transfer Protocol

No. Time Source Destination Protocol Length Info

407 2.803467 193.109.246.67 192.168.0.102 HTTP 948 HTTP/1.1 200 OK (image/x-icon)

Frame 407: 948 bytes on wire (7584 bits), 948 bytes captured (7584 bits) on interface

\Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E}, id 0

Ethernet II, Src: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0), Dst: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f)

Internet Protocol Version 4, Src: 193.109.246.67, Dst: 192.168.0.102

Transmission Control Protocol, Src Port: 80, Dst Port: 55346, Seq: 410692, Ack: 656, Len: 894

[2 Reassembled TCP Segments (1181 bytes): #406(287), #407(894)]

Hypertext Transfer Protocol

Media Type

1. **2**
2. **282**
3. **200 OK**
4. **Так, таким чином починається перший пакет протоколу ТСР.**

No. Time Source Destination Protocol Length Info

61 4.299178 192.168.0.102 128.119.245.12 HTTP 442 GET /wireshark-labs/HTTP-wireshark-file4.html HTTP/

1.1

Frame 61: 442 bytes on wire (3536 bits), 442 bytes captured (3536 bits) on interface \Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E},

id 0

Ethernet II, Src: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f), Dst: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0)

Internet Protocol Version 4, Src: 192.168.0.102, Dst: 128.119.245.12

Transmission Control Protocol, Src Port: 53712, Dst Port: 80, Seq: 1, Ack: 1, Len: 388

Hypertext Transfer Protocol

No. Time Source Destination Protocol Length Info

74 4.427966 128.119.245.12 192.168.0.102 HTTP 1127 HTTP/1.1 200 OK (text/html)

Frame 74: 1127 bytes on wire (9016 bits), 1127 bytes captured (9016 bits) on interface

\Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E}, id 0

Ethernet II, Src: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0), Dst: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f)

Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.0.102

Transmission Control Protocol, Src Port: 80, Dst Port: 53712, Seq: 1, Ack: 389, Len: 1073

Hypertext Transfer Protocol

Line-based text data: text/html (17 lines)

No. Time Source Destination Protocol Length Info

75 4.452409 192.168.0.102 128.119.245.12 HTTP 410 GET /pearson.png HTTP/1.1

Frame 75: 410 bytes on wire (3280 bits), 410 bytes captured (3280 bits) on interface \Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E},

id 0

Ethernet II, Src: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f), Dst: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0)

Internet Protocol Version 4, Src: 192.168.0.102, Dst: 128.119.245.12

Transmission Control Protocol, Src Port: 53712, Dst Port: 80, Seq: 389, Ack: 1074, Len: 356

Hypertext Transfer Protocol

No. Time Source Destination Protocol Length Info

88 4.584731 128.119.245.12 192.168.0.102 HTTP 745 HTTP/1.1 200 OK (PNG)

Frame 88: 745 bytes on wire (5960 bits), 745 bytes captured (5960 bits) on interface \Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E},

id 0

Ethernet II, Src: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0), Dst: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f)

Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.0.102

Transmission Control Protocol, Src Port: 80, Dst Port: 53712, Seq: 3994, Ack: 745, Len: 691

[3 Reassembled TCP Segments (3611 bytes): #85(1460), #86(1460), #88(691)]

Hypertext Transfer Protocol

Portable Network Graphics

No. Time Source Destination Protocol Length Info

94 4.690980 192.168.0.102 128.119.245.12 HTTP 334 GET /favicon.ico HTTP/1.1

Frame 94: 334 bytes on wire (2672 bits), 334 bytes captured (2672 bits) on interface \Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E},

id 0

Ethernet II, Src: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f), Dst: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0)

Internet Protocol Version 4, Src: 192.168.0.102, Dst: 128.119.245.12

Transmission Control Protocol, Src Port: 53712, Dst Port: 80, Seq: 745, Ack: 4685, Len: 280

Hypertext Transfer Protocol

No. Time Source Destination Protocol Length Info

101 4.818288 128.119.245.12 192.168.0.102 HTTP 538 HTTP/1.1 404 Not Found (text/html)

Frame 101: 538 bytes on wire (4304 bits), 538 bytes captured (4304 bits) on interface

\Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E}, id 0

Ethernet II, Src: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0), Dst: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f)

Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.0.102

Transmission Control Protocol, Src Port: 80, Dst Port: 53712, Seq: 4685, Ack: 1025, Len: 484

Hypertext Transfer Protocol

Line-based text data: text/html (7 lines)

No. Time Source Destination Protocol Length Info

106 4.836814 192.168.0.102 128.119.245.12 HTTP 424 GET /~kurose/cover\_5th\_ed.jpg HTTP/1.1

Frame 106: 424 bytes on wire (3392 bits), 424 bytes captured (3392 bits) on interface

\Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E}, id 0

Ethernet II, Src: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f), Dst: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0)

Internet Protocol Version 4, Src: 192.168.0.102, Dst: 128.119.245.12

Transmission Control Protocol, Src Port: 53713, Dst Port: 80, Seq: 1, Ack: 1, Len: 370

Hypertext Transfer Protocol

No. Time Source Destination Protocol Length Info

200 5.251695 128.119.245.12 192.168.0.102 HTTP 632 HTTP/1.1 200 OK (JPEG JFIF image)

Frame 200: 632 bytes on wire (5056 bits), 632 bytes captured (5056 bits) on interface

\Device\NPF\_{FE4A490D-1EF2-4034-8E18-5B6AA5EF580E}, id 0

Ethernet II, Src: Tp-LinkT\_2c:6b:d0 (30:b5:c2:2c:6b:d0), Dst: AzureWav\_89:a0:8f (f0:03:8c:89:a0:8f)

Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.0.102

Transmission Control Protocol, Src Port: 80, Dst Port: 53713, Seq: 100741, Ack: 371, Len: 578

[70 Reassembled TCP Segments (101318 bytes): #109(1460), #110(1460), #111(1460), #113(1460), #114(1460), #116(1460), #118(1460),

#119(1460), #120(1460), #122(1460), #126(1460), #127(1460), #128(1460), #130(1460), #132(1460), #133(1460), #13]

Hypertext Transfer Protocol

JPEG File Interchange Format

1. **4 128.119.245.12**
2. **Послідовно, за часом надходження відповідей та адресами.**