

Capstone Project: Wireshark Traffic Analysis-Malicious Download from a Fake Software Site

Incident Report of my Capstone Project

Capstone Title: *Wireshark Traffic Analysis — Malicious Download from a Fake Software Site*

1 Executive Summary

On **22nd January 2025**, the BluemoonTuesday SOC team detected unusual network activity from a workstation within its internal LAN **10.1.17.0/24** following the download of a suspicious **.zip** file from a fake *Google Authenticator for Windows* site. The compromised host (**10.1.17.215**) communicated with external IPs, downloaded PowerShell scripts, and demonstrated signs of post-infection Command and Control (C2) beaconing.

A detailed Wireshark traffic analysis confirmed the infection chain, identified Indicators of Compromise (IOCs), and recommended immediate containment actions.

2 Timeline of Events

Time (UTC)	Event
11:45:56	Host 10.1.17.215 sent an HTTP GET request to 5.252.153.241 for a file download.
11:45:58	Download of multiple suspicious .ps1 files and other payloads.
11:46:04	Beaconing requests observed to /1517096937 on the same external IP (C2 traffic).
11:46:23	Secondary payload downloaded from 199.232.214.172 via /filestreamingservice/files/ .
11:46:23—onward	Continued DNS queries, indicating persistence attempts and connectivity checks.

3 Analysis Walkthrough

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- The screenshot displays the Wireshark network protocol analyzer interface. The top menu bar includes File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, and Help. The toolbar contains icons for various functions like opening files, saving, and filtering. The main window is divided into three panes: Packet List, Packet Details, and Packet Bytes.
- Packet List:** Shows a list of captured packets. The first packet (No. 1) is a DHCP Discover packet from 192.168.1.10 to 255.255.255.255. The second packet (No. 2) is a DHCP Offer packet from 255.255.255.255 to 192.168.1.10.
- Packet Details:** The second packet is selected, showing its structure. It is a DHCP Offer packet (transaction ID 0x91287c03) from 255.255.255.255 to 192.168.1.10. The details include the DHCP message type, transaction ID, and the offered IP address (10.1.1.27).
- Packet Bytes:** Shows the raw data of the selected packet in hexadecimal and ASCII format.

The image displays a Wireshark packet capture analysis of an HTTP GET request and response. The packet list shows a sequence of packets, with the selected packet being a GET request for /connecttest.txt. The packet details pane shows the structure of the HTTP message, including the status bar indicating 165 bytes captured (1320 bits) on the Ethernet II interface.

No.	Time	Source	Destination	Protocol	Length	Info
111	2025-01-22 11:45:01.411106	10.1.17.215	23.220.102.9	HTTP	165	GET /connecttest.txt HTTP/1.1
112	2025-01-22 11:45:01.460188	23.220.102.9	10.1.17.215	HTTP	241	HTTP/1.1 200 OK (text/plain)
5031	2025-01-22 11:45:56.827936	10.1.17.215	5.252.153.241	HTTP	371	GET /api/file/get-file/264872 HTTP/1.1
5032	2025-01-22 11:45:56.994779	5.252.153.241	10.1.17.215	HTTP	619	HTTP/1.1 200 OK
5063	2025-01-22 11:45:58.675869	10.1.17.215	5.252.153.241	HTTP	344	GET /api/file/get-file/29842.ps1 HTTP/1.1
5071	2025-01-22 11:45:58.839486	5.252.153.241	10.1.17.215	HTTP	555	HTTP/1.1 200 OK
5075	2025-01-22 11:45:58.896228	10.1.17.215	5.252.153.241	HTTP	103	GET /1517096937 HTTP/1.1
5076	2025-01-22 11:45:59.000458	5.252.153.241	10.1.17.215	HTTP	329	HTTP/1.1 404 Not Found (text/plain)
7279	2025-01-22 11:46:04.132272	10.1.17.215	5.252.153.241	HTTP	103	GET /1517096937 HTTP/1.1
7299	2025-01-22 11:46:04.299207	5.252.153.241	10.1.17.215	HTTP	329	HTTP/1.1 404 Not Found (text/plain)
7682	2025-01-22 11:46:09.308890	10.1.17.215	5.252.153.241	HTTP	329	GET /1517096937 HTTP/1.1
7684	2025-01-22 11:46:09.474149	5.252.153.241	10.1.17.215	HTTP	329	HTTP/1.1 404 Not Found (text/plain)
7688	2025-01-22 11:46:14.480958	10.1.17.215	5.252.153.241	HTTP	103	GET /1517096937 HTTP/1.1
7690	2025-01-22 11:46:14.674308	5.252.153.241	10.1.17.215	HTTP	329	HTTP/1.1 404 Not Found (text/plain)
7696	2025-01-22 11:46:19.680055	10.1.17.215	5.252.153.241	HTTP	103	GET /1517096937 HTTP/1.1

Frame 111: 165 bytes on wire (1320 bits), 165 bytes captured (1320 bits) on Ethernet II, Src: Intel_26:8d:7a:00:08:b7:92:4a:74, Dst: Cisco_c2:3a:46:08:0d:9f:c2:3a:46

Internet Protocol Version 4, Src: 10.1.17.215, Dst: 23.220.102.9

Transmission Control Protocol, Src Port: 50087, Dst Port: 80, Seq: 1, Ack: 1, Len: 111

Hypertext Transfer Protocol

0000 00 00 0f c2 3a 46 08 00 06 b7 26 4a 01 74 08 00 45 00 ...:F...<:E...
0010 00 97 a8 5f 40 08 00 06 b7 ae 0a 01 74 07 1d 7c ...:P...h:5&S2P...
0020 66 09 c3 a7 00 50 72 ce 68 f4 04 73 24 32 50 18 ...:G...GE T/conn...
0030 00 ff 47 24 00 00 47 00 20 27 63 6f 6e 65 ...:ttest:xt HTTP/...
0040 63 74 74 65 73 74 26 74 78 20 74 08 54 50 2f ...:Connection:ke...
0050 20 43 6c 67 73 65 0d 0a 55 73 65 72 2d 41 67 65 ...:Close: User-Age...
0060 78 24 3a 20 4d 69 63 72 67 63 66 74 20 48 43 ...nt: Micr osoft NC...
0070 53 49 0d 0a 48 6f 73 74 3a 20 77 77 72 2d 6d 73 ...St: Host :www.ms...
0080 66 74 63 6f 6e 65 63 74 74 65 73 74 26 63 6f ...ftconnec ttest:co...
0090 6d 0d 0a 0d 0a

2025-01-22-traffic-analysis-exercise.pcap

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

ip.addr == 10.1.17.215 and http

No.	Time	Source	Destination	Protocol	Length	Hypertext Transfer Protocol	Info
111	2025-01-22 11:45:01.411106	10.1.17.215	23.220.102.9	HTTP	165	✓	GET /connecttest.txt HTTP/1.1
118	2025-01-22 11:45:01.460188	23.220.102.9	10.1.17.215	HTTP	241	✓	HTTP/1.1 200 OK (text/plain)
5031	2025-01-22 11:45:56.827936	10.1.17.215	5.252.153.241	HTTP	371	✓	GET /api/file/get-file/264872 HTTP/1.1
5033	2025-01-22 11:45:56.994779	5.252.153.241	10.1.17.215	HTTP	819	✓	HTTP/1.1 200 OK
5063	2025-01-22 11:45:58.675869	10.1.17.215	5.252.153.241	HTTP	144	✓	GET /api/file/get-file/29842.ps1 HTTP/1.1
5071	2025-01-22 11:45:58.839486	5.252.153.241	10.1.17.215	HTTP	555	✓	HTTP/1.1 200 OK
5073	2025-01-22 11:45:58.896228	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
5075	2025-01-22 11:45:59.094458	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7279	2025-01-22 11:46:04.132272	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7290	2025-01-22 11:46:04.299287	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7602	2025-01-22 11:46:09.308509	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7604	2025-01-22 11:46:09.474149	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7608	2025-01-22 11:46:14.480958	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7690	2025-01-22 11:46:14.674308	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7696	2025-01-22 11:46:19.680655	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1

> Frame 5031: 371 bytes on wire (2968 bits), 371 bytes captured (2968 bits) on 0

> Ethernet II, Src: Intel_26:4a:74 (08:d0:b7:26:4a:74), Dst: Cisco_c2:3a:46 (08:d0:9f:c2:3a:46)

> Internet Protocol Version 4, Src: 10.1.17.215, Dst: 5.252.153.241

> Transmission Control Protocol, Src Port: 50143, Dst Port: 80, Seq: 1, Ack: 1, Len: 317

> Hypertext Transfer Protocol

GET /api/file/get-file/264872 HTTP/1.1\r\n\r\nAccept: */*\r\n\r\nUser-Agent: Mozilla/5.0 (compatible; MSIE 7.0; Windows NT 10.0; Win64; x64; Trident/7.0; ...)\r\n\r\nHost: 5.252.153.241\r\n\r\nConnection: Keep-Alive\r\n\r\n\r\n[Response in frame 5033]

[Full request URI: http://5.252.153.241/api/file/get-file/264872]

Internet Protocol Version 4 (ip), 20 bytes

Packets: 39427 · Displayed: 1253 (3.2%)

Profile: Default

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ip.addr == 10.1.17.215 and http

No.	Time	Source	Destination	Protocol	Length	Hypertext Transfer Protocol	Info
111	2025-01-22 11:45:01.411106	10.1.17.215	23.220.102.9	HTTP	165	✓	GET /connecttest.txt HTTP/1.1
118	2025-01-22 11:45:01.460188	23.220.102.9	10.1.17.215	HTTP	241	✓	HTTP/1.1 200 OK (text/plain)
5031	2025-01-22 11:45:56.827936	10.1.17.215	5.252.153.241	HTTP	371	✓	GET /api/file/get-file/264872 HTTP/1.1
5033	2025-01-22 11:45:56.994779	5.252.153.241	10.1.17.215	HTTP	819	✓	HTTP/1.1 200 OK
5063	2025-01-22 11:45:58.675869	10.1.17.215	5.252.153.241	HTTP	144	✓	GET /api/file/get-file/29842.ps1 HTTP/1.1
5071	2025-01-22 11:45:58.839486	5.252.153.241	10.1.17.215	HTTP	555	✓	HTTP/1.1 200 OK
5073	2025-01-22 11:45:58.896228	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
5075	2025-01-22 11:45:59.094458	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7279	2025-01-22 11:46:04.132272	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7290	2025-01-22 11:46:04.299287	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7602	2025-01-22 11:46:09.308509	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7604	2025-01-22 11:46:09.474149	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7608	2025-01-22 11:46:14.480958	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7690	2025-01-22 11:46:14.674308	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7696	2025-01-22 11:46:19.680655	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1

> Frame 5073: 103 bytes on wire (824 bits), 103 bytes captured (824 bits) on 0

> Ethernet II, Src: Intel_26:4a:74 (08:d0:b7:26:4a:74), Dst: Cisco_c2:3a:46 (08:d0:9f:c2:3a:46)

> Internet Protocol Version 4, Src: 10.1.17.215, Dst: 5.252.153.241

> Transmission Control Protocol, Src Port: 50143, Dst Port: 80, Seq: 91, Ack: 1862, Len: 49

> Hypertext Transfer Protocol

GET /1517096937 HTTP/1.1\r\n\r\nHost: 5.252.153.241\r\n\r\n\r\n[Response in frame 5075]

[Full request URI: http://5.252.153.241/1517096937]

Internet Protocol Version 4 (ip), 20 bytes

Packets: 39427 · Displayed: 1253 (3.2%)

Profile: Default

Wireshark · HTTP / Requests · 2025-01-22-traffic-analysis-exercise.pcap

Request Type

/dout.aspx?ts=91930118&p=10000001&client=DynGate&data=FyQSkGjHqkys5MkoZ6ZGhyGGuamZMkoh6EYy3s700tOemJmnoKgmDwYGDYIMRZuGxowm5ovmLwnBoYGrmxucMbKsriamYUH5cmZuUqSHp8GBgyGDEbmRsaMj

/din.aspx?ts=91930165&id=D&client=DynGate&p=10000002

/din.aspx?ts=91930144&id=D&client=DynGate&p=10000002

/din.aspx?ts=91930135&id=D&client=DynGate&p=10000002

/din.aspx?ts=91930119&id=D&client=DynGate&p=10000002

/din.aspx?ts=00000000&id=D&client=DynGate&rnd=53841208&p=10000001

/din.aspx?ts=00000000&id=D&client=DynGate&rnd=427975263&p=10000001

/din.aspx?ts=00000000&id=D&client=DynGate&rnd=418412399&p=10000001

/din.aspx?ts=00000000&id=D&client=DynGate&rnd=216758732&p=10000001

/din.aspx?ts=00000000&id=D&client=DynGate&rnd=15187500&p=10000001

> download.windowsupdate.com

/c/msdownload/update/other/2025/01/42681502_106431d428d4c49b06b0d7ab662f5edba726cab

/c/msdownload/update/other/2025/01/42681409_2e243120f356d59920855a0c2b73c46f78c6cab

/c/msdownload/update/other/2025/01/42681408_eba72ad8ac0e0a04690b09c0ff175074bb281e9cab

> ctdl.windowsupdate.com

/msdownload/update/v3/static/trusted/en/pinnulesstl.cab747c71b5ae12458e

/msdownload/update/v3/static/trusted/en/disallowedcertstl.cab74dfb45145e1134f

> au.download.windowsupdate.com

/c/msdownload/update/software/defu/2025/01/am_delta_patch_1.421.1491.0_c86042b36d8f357a8e29b6f9f2fcde561c2e02.exe

5.252.153.241

/api/file/get-file/pas.ps1

/api/file/get-file/TeamViewer_Resource_fr

/api/file/get-file/TeamViewer

/api/file/get-file/TV

/api/file/get-file/29842.ps1

/api/file/get-file/264872

/1517096937?k=script%20runRH.%20status%20OK.%20message%20P5%20process%20started

/1517096937?k=message%20%20startUp%20shortcut%20created.%20%20status%20%20success;

/1517096937

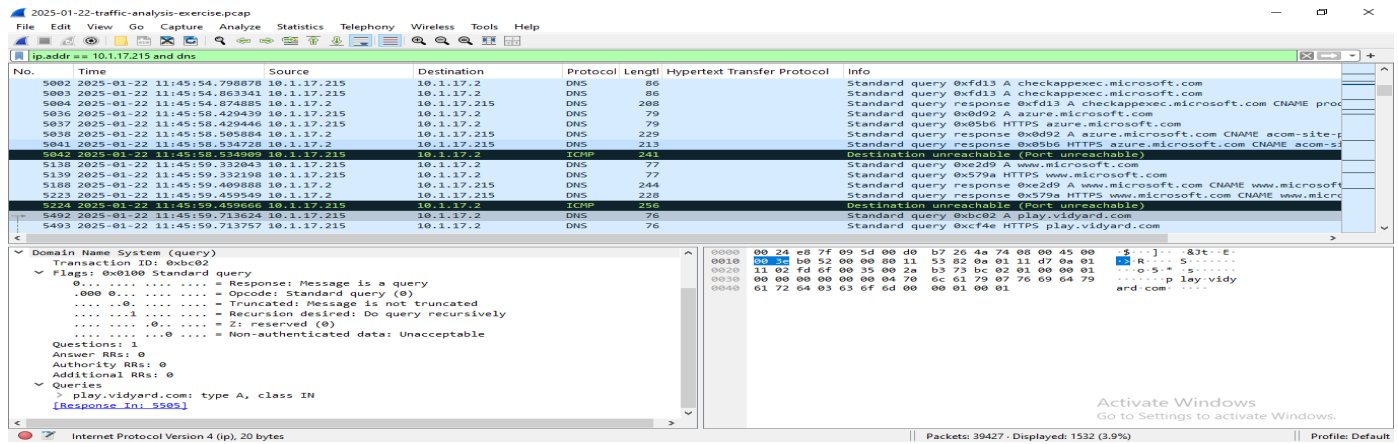
239.255.255.1900

+

Display filter: Enter a display filter ...

Activate Windows
Go to Settings to activate Windows.

Copy Save as... Close

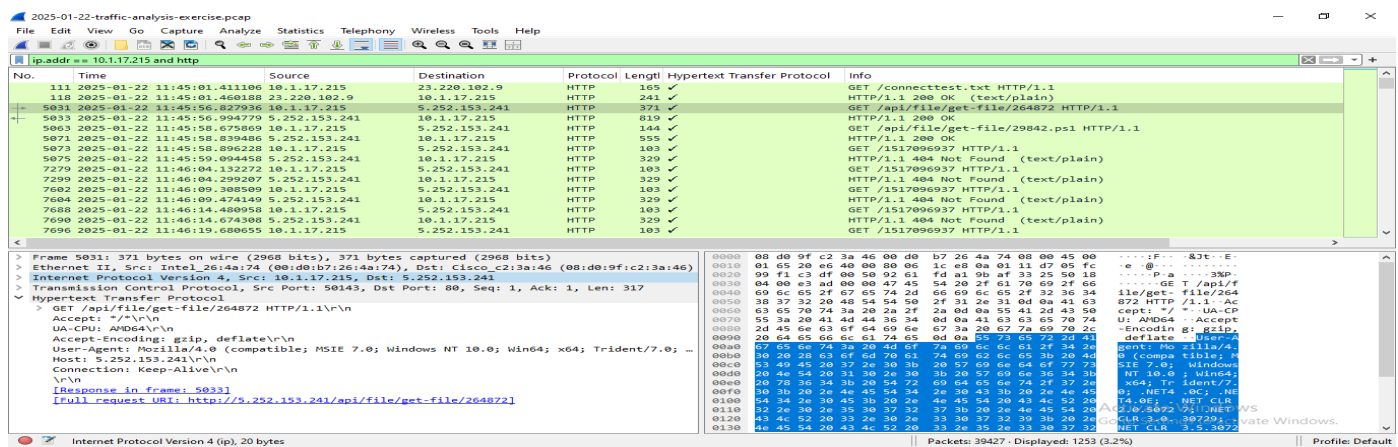


- Captured screenshots of:

- HTTP request URIs

- C2 communication GET requests

- DNS requests to play.vidyard.com, msftconnecttest.com, etc.



2025-01-22-traffic-analysis-exercise.pcap

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ip.addr == 10.1.17.215 and http

No.	Time	Source	Destination	Protocol	Length	Hypertext Transfer Protocol	Info
111	2025-01-22 11:45:01.411106	10.1.17.215	23.220.102.9	HTTP	241	✓	GET /connecttest.txt HTTP/1.1
118	2025-01-22 11:45:01.460188	23.220.102.9	10.1.17.215	HTTP	241	✓	HTTP/1.1 200 OK (text/plain)
5031	2025-01-22 11:45:56.827936	10.1.17.215	5.252.153.241	HTTP	371	✓	GET /api/file/get-file/264872 HTTP/1.1
5033	2025-01-22 11:45:56.904779	5.252.153.241	10.1.17.215	HTTP	819	✓	HTTP/1.1 200 OK
5063	2025-01-22 11:45:58.675869	10.1.17.215	5.252.153.241	HTTP	144	✓	GET /api/file/get-file/29842.ps1 HTTP/1.1
5071	2025-01-22 11:45:58.839486	5.252.153.241	10.1.17.215	HTTP	555	✓	HTTP/1.1 200 OK
5073	2025-01-22 11:45:58.896228	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
5075	2025-01-22 11:45:59.094458	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7279	2025-01-22 11:46:04.132272	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7299	2025-01-22 11:46:04.209207	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7602	2025-01-22 11:46:09.308509	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7604	2025-01-22 11:46:09.474149	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7688	2025-01-22 11:46:14.480958	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7690	2025-01-22 11:46:14.674308	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7696	2025-01-22 11:46:19.680655	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1

Internet Protocol Version 4, Src: 10.1.17.215, Dst: 5.252.153.241

0100 ... = Version: 4

0101 = Header Length: 20 bytes (5)

> Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)

Total Length: 357

Identification: 0x20e6 (8422)

010 ... = Flags: 0x2, Don't fragment

... 0000 0000 0000 = Fragment Offset: 0

Time to Live: 128

Protocol: TCP (6)

Header Checksum: 0x1dc6 [validation disabled]

[Header checksum status: Unverified]

Source Address: 10.1.17.215

Destination Address: 5.252.153.241

[Stream index: 34]

> Transmission Control Protocol, Src Port: 50144, Dst Port: 80, Seq: 1, Ack: 1, Len: 317

> Hypertext Transfer Protocol

Internet Protocol Version 4 (ip), 20 bytes

Packets: 39427 · Displayed: 1253 (3.2%)

Profile: Default

2025-01-22-traffic-analysis-exercise.pcap

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ip.addr == 10.1.17.215 and http

No.	Time	Source	Destination	Protocol	Length	Hypertext Transfer Protocol	Info
111	2025-01-22 11:45:01.411106	10.1.17.215	23.220.102.9	HTTP	165	✓	GET /connecttest.txt HTTP/1.1
118	2025-01-22 11:45:01.460188	23.220.102.9	10.1.17.215	HTTP	241	✓	HTTP/1.1 200 OK (text/plain)
5031	2025-01-22 11:45:56.827936	10.1.17.215	5.252.153.241	HTTP	371	✓	GET /api/file/get-file/264872 HTTP/1.1
5033	2025-01-22 11:45:56.904779	5.252.153.241	10.1.17.215	HTTP	819	✓	HTTP/1.1 200 OK
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5073	2025-01-22 11:45:58.896228	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
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7690	2025-01-22 11:46:14.674308	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7696	2025-01-22 11:46:19.680655	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1

Frame 5063: 144 bytes on wire (1152 bits), 144 bytes captured (1152 bits)

Ethernet II, Src: Intel_26:4a:17:4 (08:0d:b7:26:4a:17), Dst: Cisco_C2:3a:46 (08:0d:9f:c2:3a:46)

Internet Protocol Version 4, Src: 10.1.17.215, Dst: 5.252.153.241

Transmission Control Protocol, Src Port: 50144, Dst Port: 80, Seq: 1, Ack: 1, Len: 90

Hypertext Transfer Protocol

GET /api/file/get-file/29842.ps1 HTTP/1.1\r\n

Host: 5.252.153.241\r\n

Connection: Keep-Alive\r\n

\r\n

[Response in frame: 5071]

[Full request URI: http://5.252.153.241/api/file/get-file/29842.ps1]

Internet Protocol Version 4 (ip), 20 bytes

Packets: 39427 · Displayed: 1253 (3.2%)

Profile: Default

2025-01-22-traffic-analysis-exercise.pcap

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

ip.addr == 10.1.17.215 and http

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118	2025-01-22 11:45:01.460188	23.220.102.9	10.1.17.215	HTTP	241	✓	HTTP/1.1 200 OK (text/plain)
5031	2025-01-22 11:45:56.827936	10.1.17.215	5.252.153.241	HTTP	371	✓	GET /api/file/get-file/264872 HTTP/1.1
5033	2025-01-22 11:45:56.904779	5.252.153.241	10.1.17.215	HTTP	819	✓	HTTP/1.1 200 OK
5063	2025-01-22 11:45:58.675869	10.1.17.215	5.252.153.241	HTTP	144	✓	GET /api/file/get-file/29842.ps1 HTTP/1.1
5071	2025-01-22 11:45:58.839486	5.252.153.241	10.1.17.215	HTTP	555	✓	HTTP/1.1 200 OK
5073	2025-01-22 11:45:58.896228	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
5075	2025-01-22 11:45:59.094458	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7279	2025-01-22 11:46:04.132272	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7299	2025-01-22 11:46:04.209207	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7602	2025-01-22 11:46:09.308509	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7604	2025-01-22 11:46:09.474149	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7688	2025-01-22 11:46:14.480958	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7690	2025-01-22 11:46:14.674308	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7696	2025-01-22 11:46:19.680655	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1

Internet Protocol Version 4, Src: 10.1.17.215, Dst: 5.252.153.241

0100 ... = Version: 4

0101 = Header Length: 20 bytes (5)

> Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)

Total Length: 130

Identification: 0x20eb (8427)

010 ... = Flags: 0x2, Don't fragment

... 0000 0000 0000 = Fragment Offset: 0

Time to Live: 128

Protocol: TCP (6)

Header Checksum: 0x1dc6 [validation disabled]

[Header checksum status: Unverified]

Source Address: 10.1.17.215

Destination Address: 5.252.153.241

[Stream index: 34]

> Transmission Control Protocol, Src Port: 50144, Dst Port: 80, Seq: 1, Ack: 1, Len: 90

> Hypertext Transfer Protocol

Internet Protocol Version 4 (ip), 20 bytes

Packets: 39427 · Displayed: 1253 (3.2%)

Profile: Default

2025-01-22-traffic-analysis-exercise.pcap

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

ip.addr == 10.1.17.215 and http

No.	Time	Source	Destination	Protocol	Length	Hypertext Transfer Protocol	Info
111	2025-01-22 11:45:01.411106	10.1.17.215	23.220.102.9	HTTP	165		GET /connecttest.txt HTTP/1.1
118	2025-01-22 11:45:01.460188	23.220.102.9	10.1.17.215	HTTP	241		HTTP/1.1 200 OK (text/plain)
5031	2025-01-22 11:45:56.827936	10.1.17.215	5.252.153.241	HTTP	371		GET /api/file/get-file/264872 HTTP/1.1
5033	2025-01-22 11:45:56.994779	5.252.153.241	10.1.17.215	HTTP	819		HTTP/1.1 200 OK
5063	2025-01-22 11:45:58.675869	10.1.17.215	5.252.153.241	HTTP	144		GET /api/file/get-file/29842.ps1 HTTP/1.1
5071	2025-01-22 11:45:58.839486	5.252.153.241	10.1.17.215	HTTP	555		HTTP/1.1 200 OK
5075	2025-01-22 11:45:58.896228	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1
5075	2025-01-22 11:45:59.094458	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7279	2025-01-22 11:46:04.132272	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1
7299	2025-01-22 11:46:04.299207	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7602	2025-01-22 11:46:09.308509	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1
7604	2025-01-22 11:46:09.474149	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7688	2025-01-22 11:46:14.480958	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1
7690	2025-01-22 11:46:14.674308	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7696	2025-01-22 11:46:19.680655	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1

> HTTP/1.1 200 OK\r\nX-Powered-By: Express\r\nAccess-Control-Allow-Origin: *\r\nAccept-Ranges: bytes\r\nCache-Control: public, max-age=0\r\nLast-Modified: Wed, 22 Jan 2025 16:21:51 GMT\r\nETag: W/\"1a1-1948ed1f354\" \r\nContent-Type: application/octet-stream\r\nContent-Length: 417 \r\nDate: Wed, 22 Jan 2025 19:45:56 GMT\r\nConnection: keep-alive\r\nKeep-Alive: timeout=5 \r\n\r\n[Request in frame: 5031]\n[Time since request: 0.166843000 seconds]\n[Request URI: /api/file/get-file/264872]\n[Full request URI: http://5.252.153.241/api/file/get-file/264872]

Internet Protocol Version 4 (IP), 20 bytes

Packets: 39427 - Displayed: 1253 (3.2%)

2025-01-22-traffic-analysis-exercise.pcap

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

ip.addr == 10.1.17.215 and http

No.	Time	Source	Destination	Protocol	Length	Hypertext Transfer Protocol	Info
111	2025-01-22 11:45:01.411106	10.1.17.215	23.220.102.9	HTTP	165		GET /connecttest.txt HTTP/1.1
118	2025-01-22 11:45:01.460188	23.220.102.9	10.1.17.215	HTTP	241		HTTP/1.1 200 OK (text/plain)
5031	2025-01-22 11:45:56.827936	10.1.17.215	5.252.153.241	HTTP	371		GET /api/file/get-file/264872 HTTP/1.1
5033	2025-01-22 11:45:56.994779	5.252.153.241	10.1.17.215	HTTP	819		HTTP/1.1 200 OK
5063	2025-01-22 11:45:58.675869	10.1.17.215	5.252.153.241	HTTP	144		GET /api/file/get-file/29842.ps1 HTTP/1.1
5071	2025-01-22 11:45:58.839486	5.252.153.241	10.1.17.215	HTTP	555		HTTP/1.1 200 OK
5075	2025-01-22 11:45:58.896228	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1
5075	2025-01-22 11:45:59.094458	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7279	2025-01-22 11:46:04.132272	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1
7299	2025-01-22 11:46:04.299207	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7602	2025-01-22 11:46:09.308509	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1
7604	2025-01-22 11:46:09.474149	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7688	2025-01-22 11:46:14.480958	10.1.17.215	5.252.153.241	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7690	2025-01-22 11:46:14.674308	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7696	2025-01-22 11:46:19.680655	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1

> Ethernet II, Src: Cisco_C213A46 (08:d0:9f:c2:3a:46), Dst: Intel_2614a74 (08:d0:b7:26:4a:74)
> Internet Protocol Version 4, Src: 5.252.153.241, Dst: 10.1.17.215
0100 = Version: 4
... 0101 = Header Length: 20 bytes (5)
> Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
Total Length: 805
Identification: 0xd3dc (54028)
> 010 = Flags: 0x2, Don't fragment
... 00000000 = Fragment Offset: 0
Time to Live: 32
Protocol: TCP (6)
Header Checksum: 0xc901 [validation disabled]
[Header checksum status: Unverified]
Source Address: 5.252.153.241
Destination Address: 10.1.17.215
[Stream index: 34]
> Transmission Control Protocol, Src Port: 80, Dst Port: 50143, Seq: 1, Ack: 318, Len: 765
Internet Protocol Version 4 (IP), 20 bytes

Packets: 39427 - Displayed: 1253 (3.2%)

2025-01-22-traffic-analysis-exercise.pcap

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

ip.addr == 10.1.17.215 and http

No.	Time	Source	Destination	Protocol	Length	Hypertext Transfer Protocol	Info
111	2025-01-22 11:45:01.411106	10.1.17.215	23.220.102.9	HTTP	165		GET /connecttest.txt HTTP/1.1
118	2025-01-22 11:45:01.460188	23.220.102.9	10.1.17.215	HTTP	241		HTTP/1.1 200 OK (text/plain)
5031	2025-01-22 11:45:56.827936	10.1.17.215	5.252.153.241	HTTP	371		GET /api/file/get-file/264872 HTTP/1.1
5033	2025-01-22 11:45:56.994779	5.252.153.241	10.1.17.215	HTTP	819		HTTP/1.1 200 OK
5063	2025-01-22 11:45:58.675869	10.1.17.215	5.252.153.241	HTTP	144		GET /api/file/get-file/29842.ps1 HTTP/1.1
5071	2025-01-22 11:45:58.839486	5.252.153.241	10.1.17.215	HTTP	555		HTTP/1.1 200 OK
5075	2025-01-22 11:45:58.896228	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1
5075	2025-01-22 11:45:59.094458	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7279	2025-01-22 11:46:04.132272	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1
7299	2025-01-22 11:46:04.299207	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7602	2025-01-22 11:46:09.308509	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1
7604	2025-01-22 11:46:09.474149	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7688	2025-01-22 11:46:14.480958	10.1.17.215	5.252.153.241	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7690	2025-01-22 11:46:14.674308	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7696	2025-01-22 11:46:19.680655	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1

> HTTP/1.1 200 OK\r\nX-Powered-By: Express\r\nAccess-Control-Allow-Origin: *\r\nAccept-Ranges: bytes\r\nCache-Control: public, max-age=0\r\nLast-Modified: Wed, 22 Jan 2025 16:38:22 GMT\r\nETag: W/\"0e8-1948ed1f354\" \r\nContent-Type: application/octet-stream\r\nContent-Length: 1512 \r\nDate: Wed, 22 Jan 2025 19:45:58 GMT\r\nConnection: keep-alive\r\nKeep-Alive: timeout=5 \r\n\r\n[Request in frame: 5031]\n[Time since request: 0.163617000 seconds]\n[Request URI: /api/file/get-file/29842.ps1]\n[Full request URI: http://5.252.153.241/api/file/get-file/29842.ps1]

Frame (555 bytes) Reassembled TCP (1861 bytes)

Packets: 39427 - Displayed: 1253 (3.2%)

2025-01-22-traffic-analysis-exercise.pcap

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

ip.addr == 10.1.17.215 and http

No.	Time	Source	Destination	Protocol	Length	Hypertext Transfer Protocol	Info
111	2025-01-22 11:45:01.411106	10.1.17.215	23.220.102.9	HTTP	165		GET /connecttest.txt HTTP/1.1
118	2025-01-22 11:45:01.460188	23.220.102.9	10.1.17.215	HTTP	241		HTTP/1.1 200 OK (text/plain)
5031	2025-01-22 11:45:56.827936	10.1.17.215	5.252.153.241	HTTP	371		GET /api/file/get-file/264872 HTTP/1.1
5033	2025-01-22 11:45:56.904779	5.252.153.241	10.1.17.215	HTTP	815		HTTP/1.1 200 OK
5063	2025-01-22 11:45:58.675869	10.1.17.215	5.252.153.241	HTTP	144		GET /api/file/get-file/29842.ps1 HTTP/1.1
5071	2025-01-22 11:45:58.893486	5.252.153.241	10.1.17.215	HTTP	555		HTTP/1.1 200 OK
5073	2025-01-22 11:45:58.896228	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1
5075	2025-01-22 11:45:59.094458	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7279	2025-01-22 11:46:04.132272	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1
7290	2025-01-22 11:46:04.209207	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7602	2025-01-22 11:46:09.308509	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1
7604	2025-01-22 11:46:09.474149	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7688	2025-01-22 11:46:14.480958	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1
7690	2025-01-22 11:46:14.674308	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7696	2025-01-22 11:46:19.680655	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1

Internet Protocol Version 4, Src: 5.252.153.241, Dst: 10.1.17.215

0100 ... = Version: 4

0101 = Header Length: 20 bytes (5)

> Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)

Total Length: 541

Identification: 0xe70c (59148)

010 ... = Flags: 0x2, Don't fragment

... 0 0000 0000 0000 = Fragment Offset: 0

Time to Live: 30

Protocol: TCP (6)

Header checksum: 0xb209 (validation disabled)

[Header checksum status: Unverified]

Source Address: 5.252.153.241

Destination Address: 10.1.17.215

[Stream index: 34]

> Transmission Control Protocol, Src Port: 80, Dst Port: 50144, Seq: 1361, Ack: 91, Len: 501

[2 Reassembled TCP Segments (1861 bytes): #5070(1360), #5071(5011)]

Internet Protocol Version 4 (ip), 20 bytes

Frame (555 bytes) Reassembled TCP (1861 bytes)

Packets: 39427 · Displayed: 1253 (3.2%)

Profile: Default

2025-01-22-traffic-analysis-exercise.pcap

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

ip.addr == 10.1.17.215 and http

No.	Time	Source	Destination	Protocol	Length	Hypertext Transfer Protocol	Info
111	2025-01-22 11:45:01.411106	10.1.17.215	23.220.102.9	HTTP	165		GET /connecttest.txt HTTP/1.1
118	2025-01-22 11:45:01.460188	23.220.102.9	10.1.17.215	HTTP	241		HTTP/1.1 200 OK (text/plain)
5031	2025-01-22 11:45:56.827936	10.1.17.215	5.252.153.241	HTTP	371		GET /api/file/get-file/264872 HTTP/1.1
5033	2025-01-22 11:45:56.904779	5.252.153.241	10.1.17.215	HTTP	815		HTTP/1.1 200 OK
5063	2025-01-22 11:45:58.675869	10.1.17.215	5.252.153.241	HTTP	144		GET /api/file/get-file/29842.ps1 HTTP/1.1
5071	2025-01-22 11:45:58.893486	5.252.153.241	10.1.17.215	HTTP	555		HTTP/1.1 200 OK
5073	2025-01-22 11:45:58.896228	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1
5075	2025-01-22 11:45:59.094458	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7279	2025-01-22 11:46:04.132272	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1
7290	2025-01-22 11:46:04.209207	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7602	2025-01-22 11:46:09.308509	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1
7604	2025-01-22 11:46:09.474149	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7688	2025-01-22 11:46:14.480958	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1
7690	2025-01-22 11:46:14.674308	5.252.153.241	10.1.17.215	HTTP	329		HTTP/1.1 404 Not Found (text/plain)
7696	2025-01-22 11:46:19.680655	10.1.17.215	5.252.153.241	HTTP	103		GET /1517096937 HTTP/1.1

Frame 5073: 103 bytes captured (824 bits) on wire (824 bits)

Ethernet II, Src: Intel_26:4a:74 (00:d0:b7:26:4a:74), Dst: Cisco_c2:3a:46 (08:d0:9f:c2:3a:46)

Internet Protocol Version 4, Src: 10.1.17.215, Dst: 5.252.153.241

Transmission Control Protocol, Src Port: 50144, Dst Port: 80, Seq: 91, Ack: 1862, Len: 49

Hypertext Transfer Protocol

GET /1517096937 HTTP/1.1\r\n

Host: 5.252.153.241\r\n

[Response in frame: 5075]

[Full request URL: http://5.252.153.241/1517096937]

Internet Protocol Version 4 (ip), 20 bytes

Packets: 39427 · Displayed: 1253 (3.2%)

Profile: Default

2025-01-22-traffic-analysis-exercise.pcap

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

ip.addr == 10.1.17.215 and dns

No.	Time	Source	Destination	Protocol	Length	Hypertext Transfer Protocol	Info
5002	2025-01-22 11:45:54.798878	10.1.17.215	10.1.17.2	DNS	86		Standard query 0xfdf13 A checkappexec.microsoft.com
5003	2025-01-22 11:45:54.863841	10.1.17.215	10.1.17.2	DNS	86		Standard query 0xfdf13 A checkappexec.microsoft.com
5004	2025-01-22 11:45:54.874885	10.1.17.215	10.1.17.2	DNS	288		Standard query response 0xfdf13 A checkappexec.microsoft.com CNAME prod
5036	2025-01-22 11:45:58.429439	10.1.17.215	10.1.17.2	DNS	79		Standard query 0x0d92 A azure.microsoft.com
5037	2025-01-22 11:45:58.429446	10.1.17.215	10.1.17.2	DNS	79		Standard query 0x0d92 A azure.microsoft.com
5038	2025-01-22 11:45:58.505884	10.1.17.2	10.1.17.215	DNS	229		Standard query response 0x0d92 A azure.microsoft.com CNAME acom-site
5041	2025-01-22 11:45:58.534728	10.1.17.2	10.1.17.215	DNS	213		Standard query response 0x0d92 A azure.microsoft.com CNAME acom-site
5130	2025-01-22 11:45:59.332043	10.1.17.215	10.1.17.2	DNS	77		Standard query 0xe2d9 A www.microsoft.com
5139	2025-01-22 11:45:59.352198	10.1.17.215	10.1.17.2	DNS	77		Standard query 0xe2d9 A www.microsoft.com
5188	2025-01-22 11:45:59.480888	10.1.17.2	10.1.17.215	DNS	244		Standard query response 0xe2d9 A www.microsoft.com CNAME www.microsof
5223	2025-01-22 11:45:59.495049	10.1.17.2	10.1.17.215	DNS	228		Standard query response 0xe2d9 A www.microsoft.com CNAME www.micros
5274	2025-01-22 11:45:59.455066	10.1.17.2	10.1.17.2	ICMP	256		Destination unreachable (port unreachable)
5492	2025-01-22 11:45:59.713624	10.1.17.215	10.1.17.2	DNS	76		Standard query 0xcfc4e HTTP play.vidyard.com
5493	2025-01-22 11:45:59.713757	10.1.17.215	10.1.17.2	DNS	76		Standard query 0xcfc4e HTTP play.vidyard.com

Domain Name System (query)

Transaction ID: 0xb02

Flags: 0xb00 Standard query

0 = Response: Message is a query

0000 0 = Opcode: Standard query (0)

... .. = Truncated: Message is not truncated

... .. = Recursion desired: Do query recursively

... .. = Z: reserved (0)

... .. = Non-authenticated data: Unacceptable

Questions: 1

Answer RRs: 0

Authority RRs: 0

Additional RRs: 0

Queries

> play.vidyard.com: type A, class IN

[Response in: 5585]

Internet Protocol Version 4 (ip), 20 bytes

Packets: 39427 · Displayed: 1532 (3.9%)

Profile: Default

4 Host and User Details

Question

Answer

IP address of infected client	10.1.17.215
MAC address	Can be extracted via <code>eth.addr</code> filter if needed
Hostname	Seen in DNS traffic: DESKTOP-L8C5GSJ
User account name	Not captured in this PCAP (no SMB/LDAP)
Domain of fake site	Connected to 5.252.153.241 directly
C2 server IP addresses	5.252.153.241, 199.232.214.172

5 IOC Table

Indicator Type	Value
Malicious IPs	5.252.153.241, 199.232.214.172
Suspicious URLs	/api/file/get-file/, /1517096937, /filestreamingservice/files/
Domains	play.vidyard.com, msftconnecttest.com
Payload Types	PowerShell scripts, executable payloads

6 Screenshots from Wireshark

 Screenshots to capture:

- Filtered HTTP GET requests to /api/file/get-file/
- Repeated C2 beaconing GET requests to /1517096937
- DNS queries to play.vidyard.com and other unusual domains
- HTTP Statistics window from Statistics → HTTP → Requests

2025-01-22-traffic-analysis-exercise.pcap

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

ip.addr == 10.1.17.215 and http

No.	Time	Source	Destination	Protocol	Length	Hypertext Transfer Protocol	Info
111	2025-01-22 11:45:01.411106	10.1.17.215	23.220.102.9	HTTP	165	✓	GET /connecttest.txt HTTP/1.1
118	2025-01-22 11:45:01.460188	23.220.102.9	10.1.17.215	HTTP	241	✓	HTTP/1.1 200 OK (text/plain)
5031	2025-01-22 11:45:56.827936	10.1.17.215	5.252.153.241	HTTP	371	✓	GET /api/file/get-file/264872 HTTP/1.1
5033	2025-01-22 11:45:56.994779	5.252.153.241	10.1.17.215	HTTP	819	✓	HTTP/1.1 200 OK
5063	2025-01-22 11:45:58.675869	10.1.17.215	5.252.153.241	HTTP	144	✓	GET /api/file/get-file/29842.ps1 HTTP/1.1
5071	2025-01-22 11:45:58.839486	5.252.153.241	10.1.17.215	HTTP	555	✓	HTTP/1.1 200 OK
5073	2025-01-22 11:45:58.856228	10.1.17.215	5.252.153.241	HTTP	163	✓	GET /api/file/get-file/29842.ps1 HTTP/1.1
5075	2025-01-22 11:45:59.094458	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7279	2025-01-22 11:46:04.132272	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7299	2025-01-22 11:46:04.299207	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7602	2025-01-22 11:46:09.308509	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7604	2025-01-22 11:46:09.474149	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7608	2025-01-22 11:46:14.480958	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7690	2025-01-22 11:46:14.674308	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7696	2025-01-22 11:46:19.680655	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1

Frame 5063: 144 bytes on wire (1152 bits), 144 bytes captured (1152 bits)

Ethernet II, Src: Intel_26:4a:74 (08:00:b7:26:4a:74), Dst: Cisco_c2:3a:46 (08:d0:9f:c2:3a:46)

Internet Protocol Version 4, Src: 10.1.17.215, Dst: 5.252.153.241

Transmission Control Protocol, Src Port: 50144, Dst Port: 80, Seq: 1, Ack: 1, Len: 90

Hypertext Transfer Protocol

GET /api/file/get-file/29842.ps1 HTTP/1.1\r\n

Host: 5.252.153.241\r\n

Connection: Keep-Alive\r\n

\r\n

[Response in frame: 5071]

[Full request URI: http://5.252.153.241/api/file/get-file/29842.ps1]

Activate Windows
Go to Settings to activate Windows.

Internet Protocol Version 4 (ip), 20 bytes

Packets: 39427 - Displayed: 1253 (3.2%)

Profile: Default

2025-01-22-traffic-analysis-exercise.pcap

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

ip.addr == 10.1.17.215 and http

No.	Time	Source	Destination	Protocol	Length	Hypertext Transfer Protocol	Info
111	2025-01-22 11:45:01.411106	10.1.17.215	23.220.102.9	HTTP	165	✓	GET /connecttest.txt HTTP/1.1
118	2025-01-22 11:45:01.460188	23.220.102.9	10.1.17.215	HTTP	241	✓	HTTP/1.1 200 OK (text/plain)
5031	2025-01-22 11:45:56.827936	10.1.17.215	5.252.153.241	HTTP	371	✓	GET /api/file/get-file/264872 HTTP/1.1
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5075	2025-01-22 11:45:59.094458	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7279	2025-01-22 11:46:04.132272	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7299	2025-01-22 11:46:04.299207	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
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7696	2025-01-22 11:46:19.680655	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1

Internet Protocol Version 4, Src: 10.1.17.215, Dst: 5.252.153.241

0800 = Version: 4

.... 0101 Header Length: 20 bytes (5)

> Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)

Total Length: 130

Identification: 0x20eb (8427)

> 010. = Flags: 0x2, Don't fragment

... 0 0000 0000 0000 = Fragment Offset: 0

Time to Live: 128

Protocol: TCP (6)

Header Checksum: 0x1dc6 [validation disabled]

[Header checksum status: Unverified]

Source Address: 10.1.17.215

Destination Address: 5.252.153.241

[Stream index: 34]

> Transmission Control Protocol, Src Port: 50144, Dst Port: 80, Seq: 1, Ack: 1, Len: 90

> Hypertext Transfer Protocol

GET /api/file/get-file/29842.ps1 HTTP/1.1\r\n

Host: 5.252.153.241\r\n

\r\n

[Response in frame: 5071]

[Full request URI: http://5.252.153.241/1517096937]

Activate Windows
Go to Settings to activate Windows.

Internet Protocol Version 4 (ip), 20 bytes

Packets: 39427 - Displayed: 1253 (3.2%)

Profile: Default

2025-01-22-traffic-analysis-exercise.pcap

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

ip.addr == 10.1.17.215 and http

No.	Time	Source	Destination	Protocol	Length	Hypertext Transfer Protocol	Info
111	2025-01-22 11:45:01.411106	10.1.17.215	23.220.102.9	HTTP	165	✓	GET /connecttest.txt HTTP/1.1
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5031	2025-01-22 11:45:56.827936	10.1.17.215	5.252.153.241	HTTP	371	✓	GET /api/file/get-file/264872 HTTP/1.1
5033	2025-01-22 11:45:56.994779	5.252.153.241	10.1.17.215	HTTP	819	✓	HTTP/1.1 200 OK
5063	2025-01-22 11:45:58.675869	10.1.17.215	5.252.153.241	HTTP	144	✓	GET /api/file/get-file/29842.ps1 HTTP/1.1
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5073	2025-01-22 11:45:58.856228	10.1.17.215	5.252.153.241	HTTP	163	✓	GET /1517096937 HTTP/1.1
5075	2025-01-22 11:45:59.094458	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7279	2025-01-22 11:46:04.132272	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7299	2025-01-22 11:46:04.299207	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7602	2025-01-22 11:46:09.308509	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7604	2025-01-22 11:46:09.474149	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7608	2025-01-22 11:46:14.480958	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1
7690	2025-01-22 11:46:14.674308	5.252.153.241	10.1.17.215	HTTP	329	✓	HTTP/1.1 404 Not Found (text/plain)
7696	2025-01-22 11:46:19.680655	10.1.17.215	5.252.153.241	HTTP	103	✓	GET /1517096937 HTTP/1.1

Frame 5073: 103 bytes on wire (824 bits), 103 bytes captured (824 bits)

Ethernet II, Src: Intel_26:4a:74 (08:00:b7:26:4a:74), Dst: Cisco_c2:3a:46 (08:d0:9f:c2:3a:46)

Internet Protocol Version 4, Src: 10.1.17.215, Dst: 5.252.153.241

Transmission Control Protocol, Src Port: 50144, Dst Port: 80, Seq: 91, Ack: 1862, Len: 49

Hypertext Transfer Protocol

GET /1517096937 HTTP/1.1\r\n

Host: 5.252.153.241\r\n

\r\n

[Response in frame: 5073]

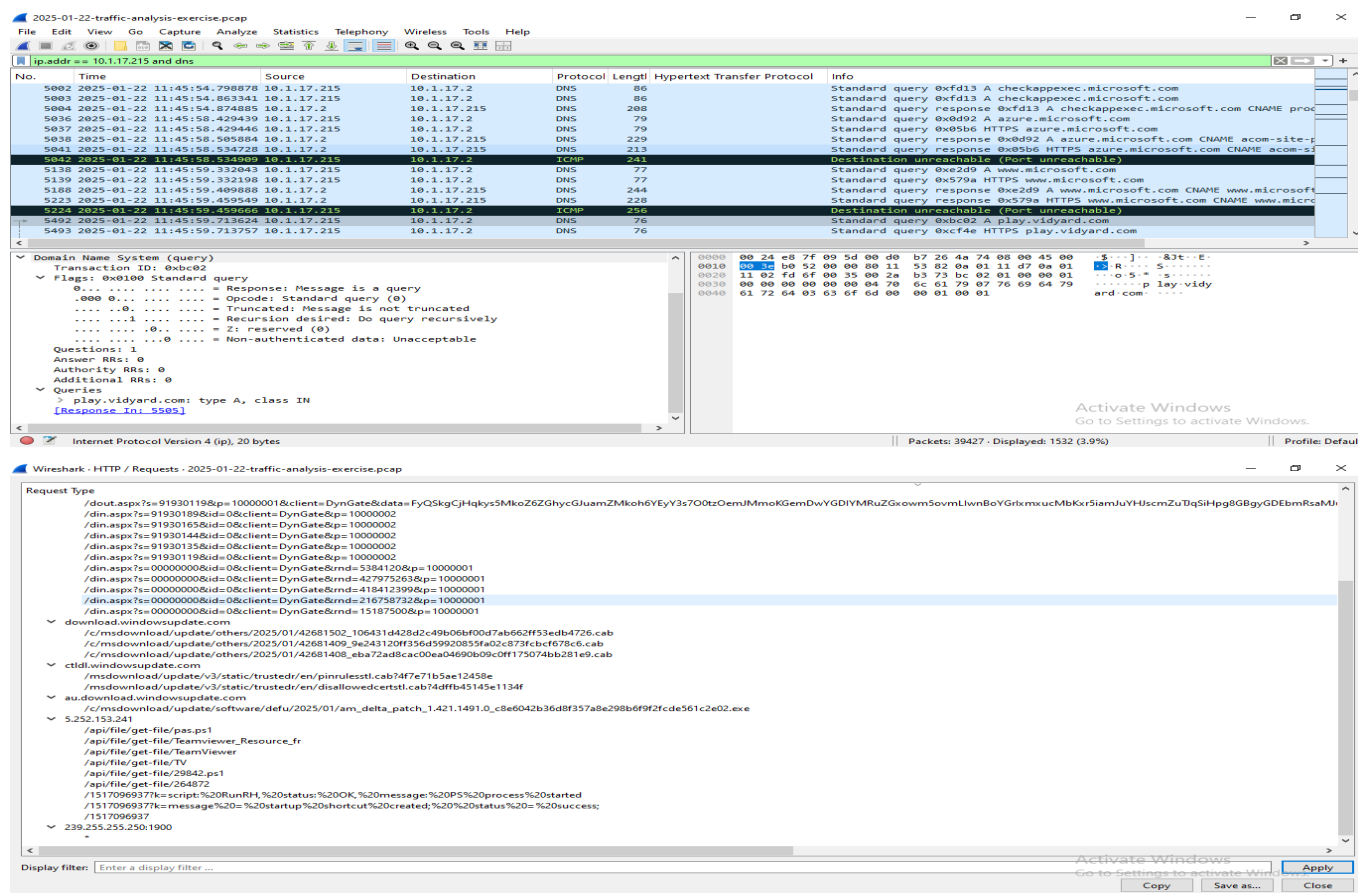
[Full request URI: http://5.252.153.241/1517096937]

Activate Windows
Go to Settings to activate Windows.

Internet Protocol Version 4 (ip), 20 bytes

Packets: 39427 - Displayed: 1253 (3.2%)

Profile: Default

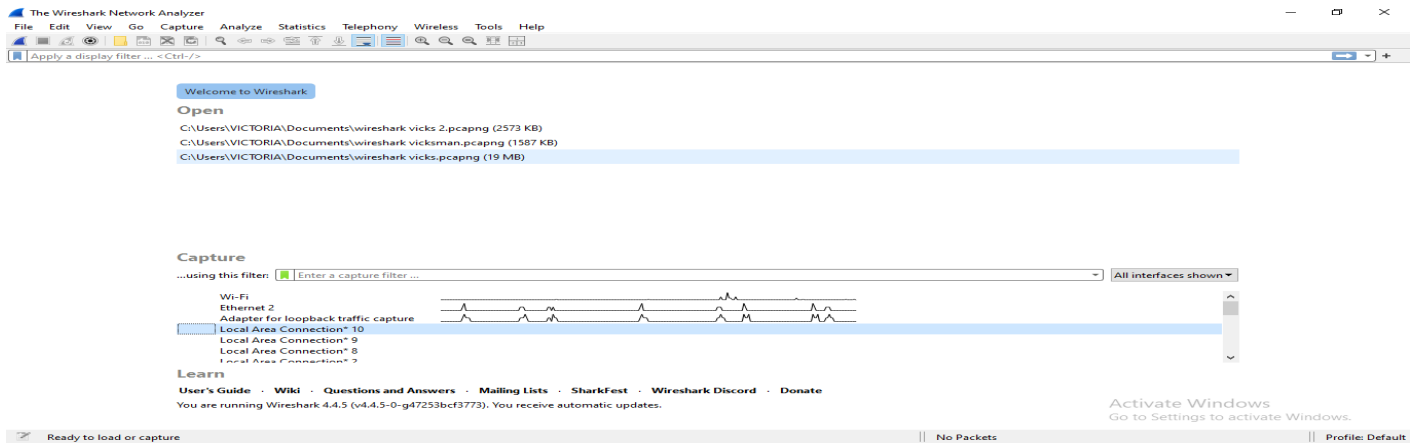
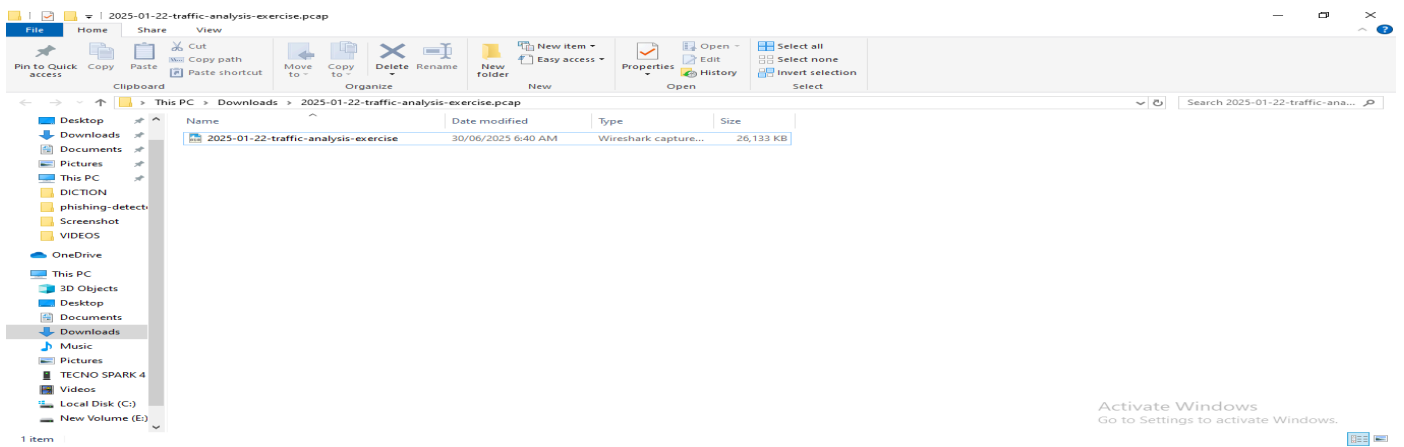
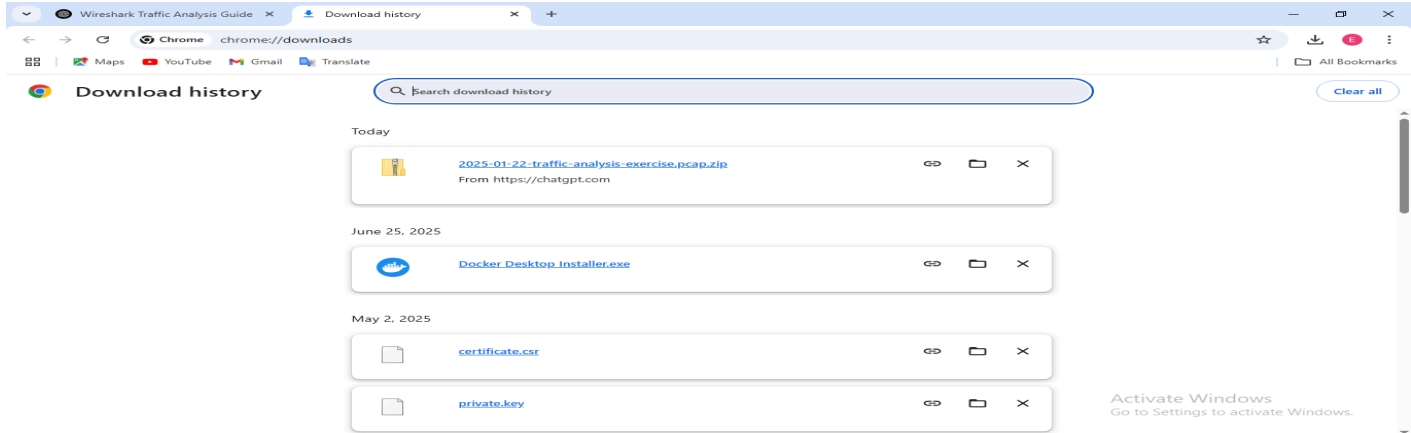


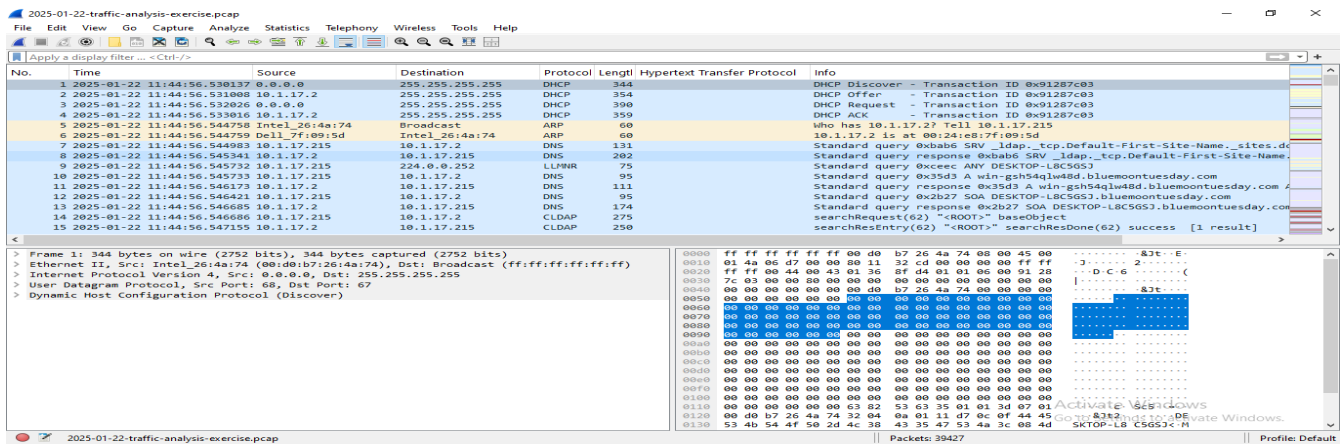
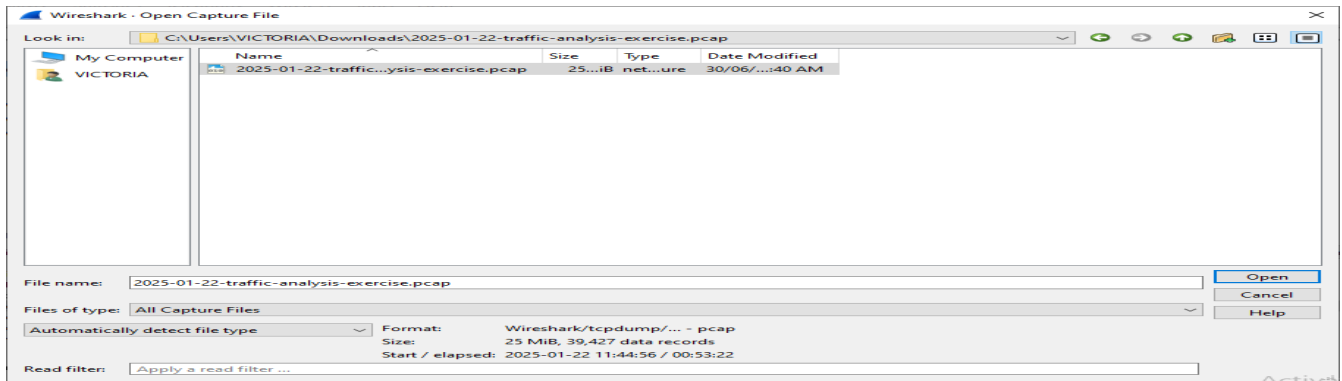
7 Recommendations for Mitigation

1. Isolate infected host **10.1.17.215** from the network immediately.
2. Block malicious IP addresses **5.252.153.241** and **199.232.214.172**.
3. Perform full endpoint malware scan and forensics.
4. Reset all credentials used on the affected system.
5. Update antivirus and EDR signatures.
6. Conduct a company-wide phishing awareness refresher.
7. Audit Active Directory for suspicious new accounts or privilege escalations.

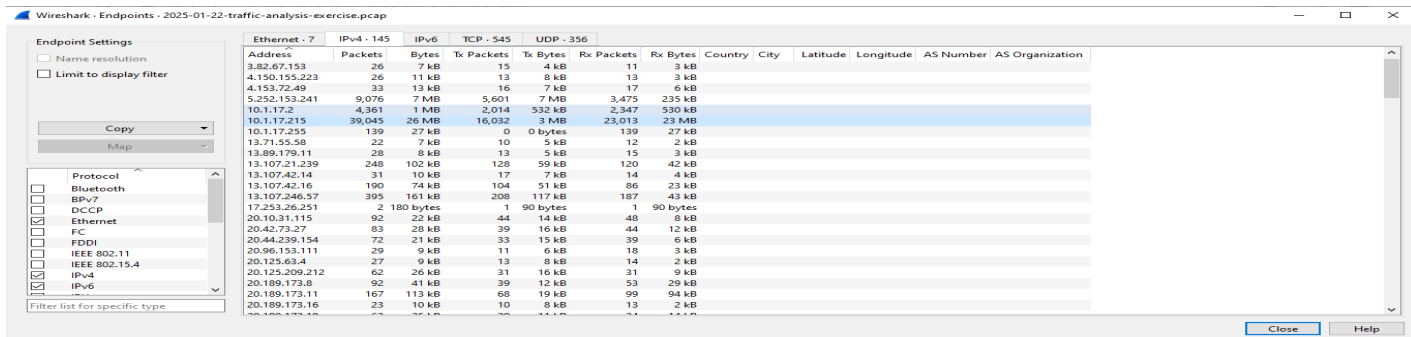
Pcap file:

Screenshot of the processes involved in downloading and uploading pcap file on Wireshark:





Screenshot of the method i used to identify the Filtered suspected internal host:



Note:

Cross-referenced the identified Indicators of Compromise (IOCs) — such as play.vidyard.com, beaconing IP addresses, and suspicious HTTP requests — against the provided threat intelligence resources (LinkedIn and Twitter/X posts from Unit42). The analysis confirmed alignment between the captured network traffic and the reported malicious activity patterns described in those sources.

Conclusion

The investigation into the suspicious network activity originating from host **10.1.17.215** successfully confirmed a malware infection incident within the BluemoonTuesday corporate network. Through detailed Wireshark traffic analysis, multiple Indicators of Compromise (IOCs) were identified — including malicious file downloads, repeated Command and Control (C2) beaconing attempts, and suspicious DNS queries.

The infection chain was reconstructed, beginning with an initial malicious HTTP download from **5.252.153.241**, followed by subsequent PowerShell script retrievals, repeated unauthorized external communications, and secondary payload downloads from **199.232.214.172**.

These findings were cross-referenced with the provided **threat intelligence resources from Unit42 on LinkedIn and Twitter/X**, validating that the observed malicious domains and network behavior matched known threat actor tactics documented in those reports.

In response, immediate containment and remediation actions were recommended, including host isolation, network blocklists, malware scans, credential resets, and staff awareness training. This case underscores the importance of proactive traffic monitoring, timely incident response, and integrating threat intelligence into SOC workflows.

The incident has been fully documented with supporting evidence, including decoded packet captures, analysis walkthroughs, IOC tables, and recommended mitigations for the organization's security leadership team.