

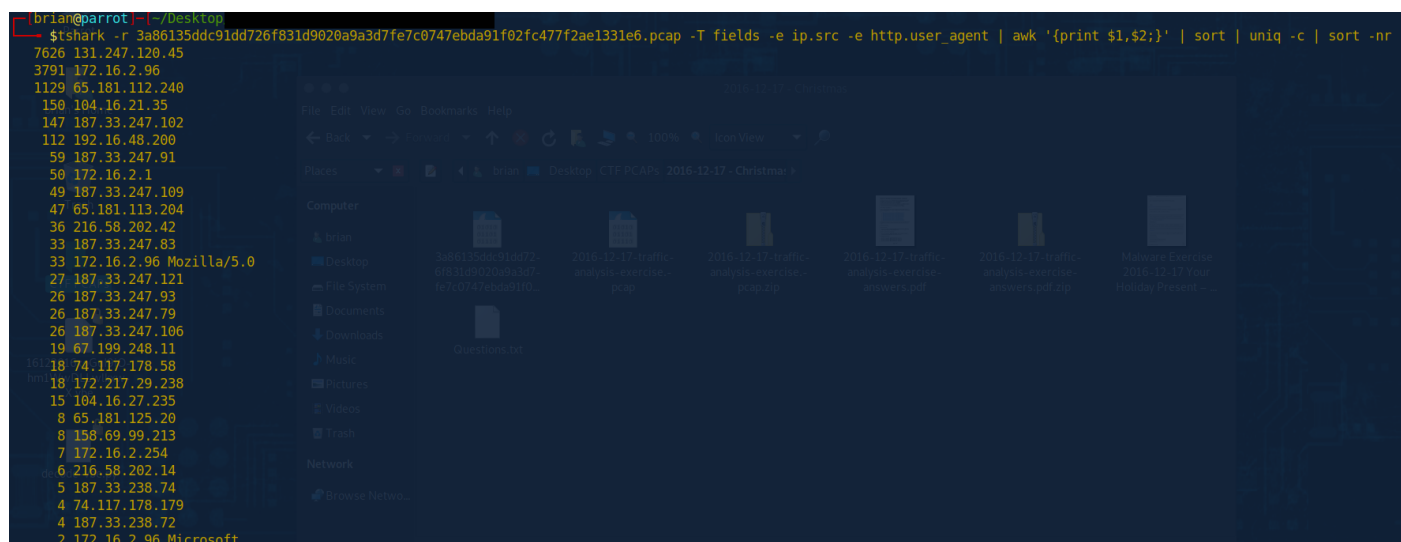
1.4 Using Tshark for a Deeper Dive

A Closer Look: This is not going to be a deep dive into T-Shark, however, what this will show is where you can start taking the same data that we were searching for in the above scenario of looking for user agents. Given this pcap doesn't have a large amount of user agent data, you can manually come to the same conclusion, but that is not an ideal way to do that. Let us get into it now.

Carving out the data: Just like above, not exact, because I am not focused on the request method, I am focused on the user agent. I will filter it using two different commands so you can see the difference in output.

Command 1

```
tshark -r 3a86135ddc91dd726f831d9020a9a3d7fe7c0747ebda91f02fc477f2ae1331e6.pcap -T fields -e ip.src -e http.user_agent | awk '{print $1,$2;}' | sort | uniq -c | sort -nr
```



The screenshot shows a terminal window with the following output:

```
brian@parrot: ~/Desktop
$ tshark -r 3a86135ddc91dd726f831d9020a9a3d7fe7c0747ebda91f02fc477f2ae1331e6.pcap -T fields -e ip.src -e http.user_agent | awk '{print $1,$2;}' | sort | uniq -c | sort -nr
7626 131.247.120.45
3791 172.16.2.96
1129 65.181.112.240
150 104.16.21.35
147 187.33.247.102
112 192.16.48.200
59 187.33.247.91
50 172.16.2.1
49 187.33.247.109
47 65.181.113.204
36 216.58.202.42
33 187.33.247.83
33 172.16.2.96 Mozilla/5.0
27 187.33.247.121
26 187.33.247.93
26 187.33.247.79
26 187.33.247.106
19 67.199.248.11
18 74.117.178.58
18 172.217.29.238
15 104.16.27.235
8 65.181.125.20
8 158.69.99.213
7 172.16.2.254
6 216.58.202.14
5 187.33.238.74
4 74.117.178.179
4 187.33.238.72
2 172.16.2.96 Microsoft
```

In the background, a file explorer window is open, showing the Desktop directory. It contains several files, including a folder named 'Desktop', a file named '3a86135ddc91dd726f831d9020a9a3d7fe7c0747ebda91f02fc477f2ae1331e6.pcap', and a file named '2016-12-17-traffic-analysis-exercise-answers.pdf'.

Command 2

```
tshark -r 3a86135ddc91dd726f831d9020a9a3d7fe7c0747ebda91f02fc477f2ae1331e6.pcap -T fields -e ip.src -e http.user_agent | awk '{if ($2) print $0;}' | sort | uniq -c | sort -nr
```

```
[brian@parrot] ~/Desktop
$ tshark -r 3a86135ddc91dd726f831d9020a9a3d7fe7c0747ebda91f02fc477f2ae1331e6.pcap -T fields -e ip.src -e http.user_agent | awk '{if ($2) print $0;}' | sort | uniq -c | sort -nr
33 172.16.2.96 Mozilla/5.0 (Windows NT 6.1; WOW64; Trident/7.0; rv:11.0) like Gecko
2 172.16.2.96 Microsoft NCSI
```

Using Tshark for a Deeper Dive

As you can see from the output from command 1 and command 2, one is nowhere near as clean. Because this search is looking for source ip and matching that to a user agent, the first command will print out every source IP it finds and every user agent. We adjusted the command to then only show if there is data in field 2 by using a simple if statement inside of awk. Then we have a much cleaner output. We can see from the output above, that 33 times, we saw the user agent Mozilla and version, then outputs the system information of Windows NT 6.1 which is windows 7. This packet does at one point show the version of windows 7, however, that is for another day. I just wanted to show you how you can leverage Wireshark and Tshark together in a more automated fashion with presets to help speed up the hunt time and make it more efficient and less painful.

Revision #4

Created 11 December 2021 03:15:24 by Brian

Updated 30 July 2022 01:15:55 by Brian