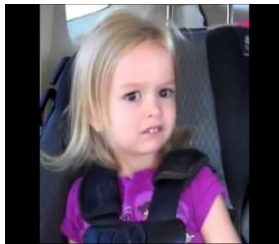


Set1.pcap

1. 678 packets
2. File transfer Protocol which is a TCP protocol
3. The data is transferred in plain text and usernames and password or any other sensitive information could be disclosed.
4. SFTP(Secure File Transfer Protocol) which does encryption before sending data
5. 192.168.1.8:21
6. Username: jfurgala and password: SophieDanielpourWantsToSueMe
7. 5
8. WTFGirl.jpg , WTFGirl12.jpg , WTFGirl3.jpg , eevee.md , WTFGirl4.jpg
9. Files



WTFGirl.jpg



WTFGirl2.jpg



WTFGirl3.jpg



WTFGirl4.jpg

Note: File eevee.md is attached.

Set2.pcap

10. 76409
11. 2
12. Sets of data:
 - [USER: wbgapp31216 PASS: Q827wO6656!nW99_a1 ; 176.58.103.138:80 ; Net-name: LINODE-UK; Https]
 - [USER: ventas@wekiguatemala.com.gt PASS: "\$Alesgt1.1" ; 74.220.219.141:143; Net-name: BlueHostNetwork-2; domain: <https://www.arin.net/>; IMAP]
13. All of the users are legitimate i.e. no login/failed access was seen.
14. IP addresses and Host Names

Hosts

#

86 entries.

17.178.96.59 apple.com

169.46.12.72 api.south.kontagent.net

17.253.23.207 cdn-icloud-content.g.aaplimg.com

72.21.206.140 s.amazon-adsystem.com

104.68.97.2 e12930.ksd.akamaiedge.net

52.45.146.29 gregord-elb-298228113.us-east-1.elb.amazonaws.com

169.46.12.74 api.south.kontagent.net
72.21.91.113 cs84.wac.edgecastcdn.net
87.240.165.81 api.vk.com
192.31.80.30 d.gtld-servers.NET
151.101.1.181 prod.taboola.map.fastly.net
151.101.65.181 prod.taboola.map.fastly.net
151.101.129.181 prod.taboola.map.fastly.net
17.142.160.59 apple.com
151.101.193.181 prod.taboola.map.fastly.net
216.115.100.123 fd-geoypci-uno.gycpi.b.yahoodns.net
104.41.208.54 production-roundrobin.skype-registar.akadns.net
23.203.204.8 e673.e9.akamaiedge.net
172.217.11.170 googleapis.l.google.com
216.115.100.124 fd-geoypci-uno.gycpi.b.yahoodns.net
23.215.130.192 a1089.d.akamai.net
23.45.86.46 e4478.a.akamaiedge.net
172.217.4.129 googlehosted.l.googleusercontent.com
23.5.251.27 e8218.dscb1.akamaiedge.net
31.13.77.49 mmx-ds.cdn.whatsapp.net
184.24.107.198 e1879.e7.akamaiedge.net
169.46.12.79 api.south.kontagent.net
54.239.17.86 completion.amazon.com
17.125.252.5 sp11p03sa.guzzoni-apple.com.akadns.net
64.4.54.254 cy2.vortex.data.microsoft.com.akadns.net
172.217.11.66 pagead46.l.doubleclick.net
95.213.11.139 api.vk.com
172.217.4.131 gstaticadssl.l.google.com
52.94.224.25 mads.amazon.com
172.217.5.202 googleapis.l.google.com
172.217.5.74 googleapis.l.google.com
115.233.212.147 ps.cname2.igexin.com

104.244.46.231 wildcard.twimg.com
104.244.46.39 wildcard.twimg.com
107.23.77.203 gregord-elb-298228113.us-east-1.elb.amazonaws.com
34.201.64.150 lc80.dsr.livefyre.com
104.27.183.94 warl0ck.gam3z.com
169.46.12.84 api.south.kontagent.net
74.125.28.188 mobile-gtalk.l.google.com
17.139.246.5 mt-ingestion-service-pv.itunes-apple.com.akadns.net
216.58.193.202 googleapis.l.google.com
17.173.66.102 p51-buy.itunes-apple.com.akadns.net
17.139.246.6 mt-ingestion-service-pv.itunes-apple.com.akadns.net
192.33.14.30 b.gtld-servers.NET
208.71.44.30 fd-geoycpi-uno.gycpi.b.yahoodns.net
17.172.224.47 apple.com
17.139.246.7 mt-ingestion-service-pv.itunes-apple.com.akadns.net
208.71.44.31 fd-geoycpi-uno.gycpi.b.yahoodns.net
218.205.81.155 ps.cname2.igexin.com
165.227.0.37 vtfbctf.com
169.46.12.66 api.south.kontagent.net
172.217.11.74 googleapis.l.google.com
17.56.160.246 api.smoot-apple.com.akadns.net
169.46.12.88 api.south.kontagent.net
23.253.220.65 schemaverse.marcneuwirth.com
192.5.6.30 a.gtld-servers.NET
23.203.233.109 e2546.dsce4.akamaiedge.net
169.46.12.68 api.south.kontagent.net
216.58.216.46 connectivitycheck.android.com
192.12.94.30 e.gtld-servers.NET
104.27.182.94 warl0ck.gam3z.com
216.58.216.4 www.google.com
23.203.180.198 e6858.dsce9.akamaiedge.net

169.46.12.69 api.south.kontagent.net
 23.215.130.184 a1089.d.akamai.net
 172.217.4.142 clients.l.google.com
 115.231.99.203 ps.cname2.igexin.com
 169.46.12.70 api.south.kontagent.net
 192.26.92.30 c.gtld-servers.NET
 17.253.23.205 cdn-icloud-content.g.aaplimg.com
 104.244.46.71 wildcard.twimg.com
 169.46.12.93 api.south.kontagent.net
 2001:500:856e::30 d.gtld-servers.NET
 2001:503:a83e::2:30 a.gtld-servers.NET
 2400:cb00:2048:1::681b:b65e warl0ck.gam3z.com
 2001:503:83eb::30 c.gtld-servers.NET
 2607:f8b0:4007:804::2002 pagead46.l.doubleclick.net
 2400:cb00:2048:1::681b:b75e warl0ck.gam3z.com
 2607:f8b0:4007:809::2004 www.google.com
 2607:f8b0:4007:800::2003 ssl.gstatic.com
 2001:503:231d::2:30 b.gtld-servers.NET

Set3.pcap

15. 3

16. Sets of data:

- [USER: brodgers PASS: TheyPlayedWithGreatCharacter ; 130.64.23.35:80 ; Https;
www.eecs.tufts.edu/~cgregg/grades/]
- [USER: dmoyes PASS: IAmAFootballGenius ; 130.64.23.35:80 ; Https;
www.eecs.tufts.edu/~cgregg/grades/]
- [USER: aoursler PASS: Id10tExpert ; 130.64.23.35:80 ; Https;
www.eecs.tufts.edu/~cgregg/grades/]

17. None of the three plain text username-address pairs were legitimate.

18. I used Ettercap to find the plain text username-password pairs and then selected the unique ones if there were any repeats.

19. Since all the login attempts were done using HTTP protocol so I filtered out the packets containing get request using `http.request.method == "GET"`. This way I was able to get three packets each containing the username-password credentials and the user's attempt to login. These packets also contained the location of the corresponding response packet. For each of the user attempt, I opened the corresponding packet which contained the response of that login attempt and found out where it was 401 or a success 200 Ok login.

Set4.pcap

20. The next location of Carmen Sandiego is going to be Africa as mentioned in the lyrics of song the song in a file named 'blessed' which is mp4. I determined the information by exporting and checking each http object in set4.pcap and the mp4 file came out to be something containing the next whereabouts of Carmen Sandiego.
21. The best way for these people to defend against sniffing is to use a VPN which is a virtual private network and ensure that all the data communication is encrypted. In addition to the use of VPN, a pro tip would be that these people should avoid using HTTP websites and rather prefer to use HTTPS websites which are a lot more secure due to SSL. HTTPS websites ensures data is encrypted when it is sent so that any intruder is not able to see the meaningful content in the data when the data is getting transferred.