Austin Brown
CPE 434-01
3/16/2021
Lab 10

Subtask 1

2 3 4 5 6 7	0.002572 4 0.004160	192.168.0.2 192.168.0.1 192.168.0.2	192.168.0.1 192.168.0.2	TCP TCP	74 1550 → 23 [SYN] Seq=0 Win=32120 Len=0 MSS=1460 SACK_PERM=1 TSval=10233636 TSecr=0 WS=1 74 23 → 1550 [SYN, ACK] Seq=0 Ack=1 Win=17376 Len=0 MSS=1448 WS=1 TSval=2467372 TSecr=10233636
3 4 5 6 7	0.002572 4 0.004160	192.168.0.2		TCP	74 22 - 4550 [CVAL ACK] C 0 A-1 4 His 47276 L 0 MCC 4440 HC 4 TC] 2467272 TC 40222626
4 5 6 7	1 0.004160				74 23 → 1000 [SYN, ACK] Seq=0 ACK=1 WIN=1/3/0 Len=0 MSS=1448 WS=1 ISVa1=240/3/2 ISeCT=10233030
5 6 7		102 160 0 2	192.168.0.1	TCP	66 1550 → 23 [ACK] Seq=1 Ack=1 Win=32120 Len=0 TSval=10233636 TSecr=2467372
6 7	0.150335	192.168.0.2	192.168.0.1	TELNET	93 Telnet Data
- 7		192.168.0.1	192.168.0.2	TELNET	69 Telnet Data
		192.168.0.2	192.168.0.1	TCP	66 1550 → 23 [ACK] Seq=28 Ack=4 Win=32120 Len=0 TSval=10233651 TSecr=2467372
		192.168.0.2	192.168.0.1	TELNET	69 Telnet Data
8	3 0.151946	192.168.0.1	192.168.0.2	TCP	66 23 → 1550 [ACK] Seq=4 Ack=31 Win=17376 Len=0 TSval=2467372 TSecr=10233651
9	0.153657	192.168.0.1	192.168.0.2	TELNET	91 Telnet Data
		192.168.0.2	192.168.0.1	TELNET	130 Telnet Data
11	l 0.154984	192.168.0.1	192.168.0.2	TCP	66 23 → 1550 [ACK] Seq=29 Ack=95 Win=17312 Len=0 TSval=2467372 TSecr=10233651
		192.168.0.1	192.168.0.2	TELNET	84 Telnet Data
		192.168.0.2	192.168.0.1	TELNET	75 Telnet Data
14	4 0.156646	192.168.0.1	192.168.0.2	TCP	66 23 → 1550 [ACK] Seq=47 Ack=104 Win=17367 Len=0 TSval=2467372 TSecr=10233651
		rsion 4, Src: 192.168 Protocol, Src Port:			ck: 31, Len: 0
		a 00 00 c0 9f a0 97			
		0 40 06 99 96 c0 a8			
		le 17 f1 63 41 99 c5		· · · · cA · · · ·	
0030 43		0 01 01 08 0a 00 25	ab 2c 00 9c C- @-	%.,	••
			3		

- 1. There are 92 packets in the capture.
- 2. The client has an address of 192.168.0.2. It is communicating with a telnet server. It has an address of 198.168.0.1. The client is using 3m-image-lm as a source port and telnet as the destination. The server uses telnet as the source and 3m-image-lm as the destination.
- 3. They are using telnet and TCP.
- 4. The arrival of the first frame is at 20:12:38.387203000.

```
Encapsulation type: Ethernet (1)
Arrival Time: Nov 27, 1999 20:12:38.387203000 Central Standard Time
[Time shift for this packet: 0.000000000 seconds]
```

The arrival of the last frame is 20:13:17.958477.

```
Arrival Time: Nov 27, 1999 20:13:17.958477000 Central Standard Time
```

The total transmission time is 39.571274 seconds.

5. Frame 47 is 554 bytes. The telnet server sends it to the client.

Subtask 2

6. It is sent by the telnet server to client.

```
Internet Protocol Version 4, Src: 192.168.0.1, Dst: 192.168.0.2
    0100 .... = Version: 4
    ... 0101 = Header Length: 20 bytes (5)
    Differentiated Services Field: 0x10 (DSCP: Unknown, ECN: Not-ECT)
    Total Length: 52
    Identification: 0x5fca (24522)
    Flags: 0x00
    Fragment Offset: 0
    Time to Live: 64
    Protocol: TCP (6)
    Header Checksum: 0x9996 [validation disabled]
```

- 7. The time to live is how long until the frame is discarded. It is 64 as per the last screenshot.
- 8. I can see the username and password. They are fake and user.

```
......#..%..
%.....Р. .....b.....b.....в.
9600,9600....#.bam.zing.org:0.0....'..DISPLAY.bam.zing.org:0.0.....xterm-
color.....".....!...........".......
OpenBSD/i386 (oof) (ttyp2)
login: fake
.....Password:user
.....Last login: Sat Nov 27 20:11:43 on ttyp2 from bam.zing.org
Warning: no Kerberos tickets issued.
OpenBSD 2.6-beta (OOF) #4: Tue Oct 12 20:42:32 CDT 1999
Welcome to OpenBSD: The proactively secure Unix-like operating system.
Please use the sendbug(1) utility to report bugs in the system.
Before reporting a bug, please try to reproduce it with the latest
version of the code. With bug reports, please try to ensure that
enough information to reproduce the problem is enclosed, and if a
known fix for it exists, include that as well.
```

```
9600,9600....#.bam.zing.org:0.0....'..DISPLAY.bam.zing.org:0.0.....xterm-
color....".......
OpenBSD/i386 (oof) (ttyp1)
login: .."....."ffaakkee
Password:user
Last login: Thu Dec 2 21:32:59 on ttyp1 from bam.zing.org
Warning: no Kerberos tickets issued.
OpenBSD 2.6-beta (OOF) #4: Tue Oct 12 20:42:32 CDT 1999
Welcome to OpenBSD: The proactively secure Unix-like operating system.
Please use the sendbug(1) utility to report bugs in the system.
Before reporting a bug, please try to reproduce it with the latest
version of the code. With bug reports, please try to ensure that
enough information to reproduce the problem is enclosed, and if a
known fix for it exists, include that as well.
```

The username is ..""ffaakkee. The password is user.

- 10. The information is stored as plaintext. Secret information should be encrypted.
- 11. UTFP is an encrypted file transfer protocol. It can send to multiple receivers at once. The sender is uftp_v3_transfer.pcapng. It has an ip of 10.0.0.1. The receiving group has an ip of 230.4.4.1.
- 12. UDP essentially just sends data out into the void. It does not care if anything is listening and does not check for it. This can result in packet loss. TCP relies on a 3-way handshake. This ensures that there is a receiver at the other end.

Subtask 3

- 12. http is unsecured. https uses transport layer security to encrypt connections.
- 13. This file is not encrypted. I can read data in packet 34.

```
0020 00 fe 0c ea db 62 cd 34 98 ab cc d8 bd 36 80 18
                                                         -----b-4 -----6--
0030 02 11 84 31 00 00 01 01
                               08 0a 00 f1 80 54 00 f1
                                                         0040 80 53 01 00 00 01 03 24
                              00 00 02 03 64 65 66 04
                                                         -S----$ ---def-
0050 74 65 73 74 03 66 6f 6f
                              03 66 6f 6f 02 69 64 02
                                                         test-foo -foo-id-
0060 69 64 0c 3f 00 0a 00 00
                              00 08 23 42 00 00 00 2c
                                                         id-?---,
                                                         · · · · def · test · foo
0070 00 00 03 03 64 65 66 04
                              74 65 73 74 03 66 6f 6f
0080 03 66 6f 6f 06 61 6e 69
                                                         -foo-ani mal-anim
                               6d 61 6c 06 61 6e 69 6d
                                                         al.!....(
0090 61 6c 0c 21 00 c0 00 00
                              00 fd 01 10 00 00 00 28
00a0 00 00 04 03 64 65 66 04
                              74 65 73 74 03 66 6f 6f
                                                         · · · · def · test · foo
00b0 03 66 6f 6f 04 6e 61 6d
                              65 04 6e 61 6d 65 0c 21
                                                         -foo-nam e-name-!
00c0 00 c0 00 00 00 fd 00 00
                                                         . . . . . . . . . . . . . . . . .
                               00 00 00 05 00 00 05 fe
00d0 00 00 22 00 0c 00 00 06
                               01 31 03 64 6f 67 05 47
                                                         --"-------1-dog-G
00e0 6f 6f 66 79 0f 00 00 07
                               01 32 03 63 61 74 08 47
                                                         oofv···· · 2·cat·G
                                                         arfield· ····"·
00f0 61 72 66 69 65 6c 64 05
                              00 00 08 fe 00 00 22 00
```

14. This file is encrypted. The file is unreadable.

```
0000 00 11 0a 18 01 14 00 90
                              f5 aa 83 da 08 00 45 08
                                                        ----E-
                              8f 66 c0 a8 02 66 c0 a8
0010
     00 ce 24 a0 40 00 40 06
                                                        --$-@-@- -f---f--
                                                        ·e····· aEV·····
0020 02 65 86 ef 0c ea 10 b7
                              61 45 56 de d7 d4 80 18
0030 01 0e 86 dc 00 00 01 01
                              08 0a 2a 4a 7b c3 0c ab
                                                        ....*J{...
                                                        ·i···· · f·····
0040 e2 69 17 03 01 00 20 01
                              66 fd 1a 1b 1b 18 ed 04
0050 76 81 58 d2 63 ef ea e6
                              62 fb fb 5a bd c9 62 17
                                                       v-X-c--- b--Z--b-
0060 1e 1a 15 ef ef 4b 07 17
                                                        -----K-- ---p---b
                              03 01 00 70 18 15 de 62
0070 8c 1d 26 15 cb f6 85 7f
                              b0 11 40 81 0b 50 3d bb
                                                        --&-----P=-
                                                        2-K-v2-E ---c-I1-
0080 32 09 4b a1 76 32 9a 45
                              0c 9b 9f 63 e0 49 6c 10
0090 37 4a 9e 0c aa d4 09 bc
                              1d 0e 60 32 07 c4 72 d7
                                                        7J..... ...`2..r.
                                                        ---h0h-- F-lus-+-
00a0 a8 b9 01 68 30 68 1b d0
                              46 d0 5d 75 73 03 2b 8d
00b0 c4 01 36 d0 5c ff 12 b5
                              63 eb ab 43 f6 e7 d6 53
                                                        --6-\--- c--C---S
                                                        .X --ar -0---3-
                              06 4f cb 15 a2 f6 33 03
00c0 2e 58 20 ca 2d 61 72 7c
                                                        ---M%fC- --/-
00d0 f3 fd 8a 4d 25 66 43 04
                             dc c1 2f 0a
```

15. This file is encrypted. Several packets have security layers listed.

```
> Frame 11: 503 bytes on wire (4024 bits), 503 bytes captured (4024 bits)
> Ethernet II, Src: 00:00:00_00:00:00 (00:00:00:00:00), Dst: 00:00:00_00:00:00 (00:00:00:00:00)
> Internet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.1
> Transmission Control Protocol, Src Port: 38713, Dst Port: 443, Seq: 318, Ack: 1005, Len: 437
\(\times\) Transport Layer Security
```

> SSLv3 Record Layer: Application Data Protocol: http-over-tls

16. The decryption of the file is below.

```
; U; Lin ux
      3b 20 55 3b 20 4c 69 6e
                               75 78 20 69 36 38 36 3b
     20 66 72 3b 20 72 76 3a
                               31 2e 38 2e 30 2e 32 29
                                                           fr; rv:
0070
     20 47 65 63 6b 6f 2f 32
                               30 30 36 30 33 30 38 20
                                                           Gecko/2 0060308
0080 46 69 72 65 66 6f 78 2f
                               31 2e 35 2e 30 2e 32 0d
                                                          Firefox/
     0a 41 63 63 65 70 74 3a
                               20 69 6d 61 67 65 2f 70
                                                          ·Accept:
                                                                    image/
00a0
     6e 67 2c 2a 2f 2a 3b 71
                               3d 30 2e 35 0d 0a 41 63
                                                          ng, */*;q
                                                          cept-Lan guage:
00b0
     63 65 70 74 2d 4c 61 6e
                               67 75 61 67 65 3a 20 66
                                                          r, fr-fr;
00c0
     72 2c 66 72 2d 66 72 3b
                               71 3d 30 2e 38 2c 65 6e
00d0
     2d 75 73 3b 71 3d 30 2e
                               35 2c 65 6e 3b 71 3d 30
                                                          -us;q=0.
                                                          .3· Acce pt-
ing: gzi
00e0 2e 33 0d 0a 41 63 63 65
                                70 74 2d 45 6e 63 6f 64
00f0
      69 6e 67 3a 20 67 7a 69
                               70 2c 64 65 66 6c 61 74
0100
      65 0d 0a 41 63 63 65 70
                               74 2d 43 68 61 72 73 65
                                                          e··Accep t-
0110
     74 3a 20 49 53 4f 2d 38
                               38 35 39 2d 31 2c 75 74
                                                          t: ISO-8
0120
     66 2d 38 3b 71 3d 30 2e
                               37 2c 2a 3b 71 3d 30 2e
                                                          f-8;q=0.
0130 37 0d 0a 4b 65 65 70 2d
                               41 6c 69 76 65 3a 20 33
                                                          7 · Keep- Alive:
0140 30 30 0d 0a 43 6f 6e 6e
                               65 63 74 69 6f 6e 3a 20
                                                          00 · Conn ection:
```

- 1. The image is requested in frame 31.
- 2. It responds with 200.

3.



Subtask 4

18.

```
-(austinsbrown⊛kali)-[~]

└$ ifconfig

eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
       inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
       inet6 fe80::a00:27ff:fe46:72cl prefixlen 64 scopeid 0x20<link>
       ether 08:00:27:46:72:c1 txqueuelen 1000 (Ethernet)
       RX packets 18532 bytes 18081022 (17.2 MiB)
       RX errors 0 dropped 0 overruns 0 frame 0
       TX packets 6912 bytes 957343 (934.9 KiB)
       TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
       inet 127.0.0.1 netmask 255.0.0.0
       inet6 ::1 prefixlen 128 scopeid 0x10<host>
       loop txqueuelen 1000 (Local Loopback)
       RX packets 72 bytes 3600 (3.5 KiB)
       RX errors 0 dropped 0 overruns 0 frame 0
       TX packets 72 bytes 3600 (3.5 KiB)
       TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

No.	Time	Source	Destination	Protocol I	Lengt [†] Info
	21.506780747		157.140.2.32	TCP	74 [TCP Retransmission] 34486 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK PERM=1 TSval=3310138254 TSecr=0 WS=1024
	21.735103613		157.140.2.32	TCP	74 [TCP Retransmission] 34496 - 80 [SYN] Seg=0 Win=64240 Len=0 MSS=1460 SACK PERM=1 TSval=3310138483 TSecr=0 WS=1024
		10.0.2.15	157.140.2.32		74 TCP Retransmission 34492 - 80 [SYN] Seg=0 Win=64240 Len=0 MSS=1460 SACK PERM=1 TSval=3310138483 TSecr=0 WS=1024
1509		10.0.2.15	157.140.2.32		74 TCP Retransmission 34490 → 80 SYN Seg=0 Win=64240 Len=0 MSS=1460 SACK PERM=1 TSval=3310138483 TSecr=0 WS=1024
1510	22.502941118	10.0.2.15	104.76.210.90	TCP	54 [TCP Keep-Alive] 42190 - 80 [ACK] Seq=370 Ack=889 Win=63936 Len=0
1511	22.503852065	104.76.210.90	10.0.2.15	TCP	60 [TCP Keep-Alive ACK] 80 → 42190 [ACK] Seq=889 Ack=371 Win=65535 Len=0
	22.763859706		13.249.112.123	TCP	54 [TCP Keep-Alive] 35100 → 443 [ACK] Seq=1325 Ack=5945 Win=63900 Len=0
		13.249.112.123	10.0.2.15	TCP	60 [TCP Keep-Alive ACK] 443 → 35100 [ACK] Seq=5945 Ack=1326 Win=65535 Len=0
	23.785816575		74.125.21.94	TCP	54 [TCP Keep-Alive] 48068 → 80 [ACK] Seq=377 Ack=702 Win=63791 Len=0
	23.786856047		10.0.2.15	TCP	60 [TCP Keep-Alive ACK] 80 → 48068 [ACK] Seq=702 Ack=378 Win=65535 Len=0
	24.554741267		104.20.150.16	TCP	54 [TCP Keep-Alive] 42290 -> 80 [ACK] Seq=290 Ack=871 Win=63510 Len=0
		104.20.150.16	10.0.2.15	TCP	60 [TCP Keep-Alive ACK] 80 - 42290 [ACK] Seq=871 Ack=291 Win=65535 Len=0
	24.823272495		157.140.2.32 72.21.91.29	TCP	74 [TCP Retransmission] 34452 - 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=3310141571 TSecr=0 WS=1024
	25.069883092		10.0.2.15	TCP	54 [TCP Keep-Alive] 57292 → 80 [ACK] Seq=742 Ack=1407 Win=63920 Len=0 60 [TCP Keep-Alive ACK] 80 → 57292 [ACK] Seq=1407 Ack=743 Win=65535 Len=0
	28.341688931		10.0.2.15	TCP	00 [TCF REEP-ALIVE ACK] 00 - 3/292 [ACK] SEQ-1407 ACK-743 WIN-03535 LEN-0 60 80 - 34456 [SVN, ACK] Seq-0 Ack-1 Win-65535 Len-0 MSS-1400
	28.342281875		157.140.2.32	TCP	54 34456 - 80 [ACK] Seg=1 ACk=1 Win=64240 Len=0
	28.592419847		10.0.2.15	TCP	60 80 - 34474 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1460
	28.592467785		157.140.2.32	TCP	54 34474 - 80 [RST] Seg=1 Win=0 Len=0
1525	28.651227377	10.0.2.15	157.140.2.32		74 [TCP Retransmission] 34460 - 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK PERM=1 TSval=3310145399 TSecr=0 WS=1024
L 1526	28.651873331	10.0.2.15	157.140.2.32	TCP	74 TCP Retransmission 34462 - 80 SYN Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=3310145399 TSecr=0 WS=1024
1527	28.652099834	10.0.2.15	157.140.2.32	TCP	74 [TCP Retransmission] 34464 - 80 [SYN] Seg=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=3310145400 TSecr=0 WS=1024
		10.0.2.15	157.140.2.32		74 [TCP Retransmission] 34466 - 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=3310145400 TSecr=0 WS=1024
	28.652729474		108.177.122.94	TCP	54 [TCP Keep-Alive] 33170 → 80 [ACK] Seq=1888 Ack=3509 Win=63791 Len=0
		108.177.122.94	10.0.2.15	TCP	60 [TCP Keep-Alive ACK] 80 - 33170 [ACK] Seq=3509 Ack=1889 Win=65535 Len=0
	29.739248455		157.140.2.32	TCP	74 [TCP Retransmission] 34486 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=3310146487 TSecr=0 WS=1024
	29.938597978		157.140.2.32	TCP	74 [TCP Retransmission] 34490 - 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=3310146686 TSecr=0 WS=1024
	29.938747845		157.140.2.32	TCP TCP	74 [TCP Retransmission] 34492 - 80 [SYN] Seg=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=3310146686 TSecr=0 WS=1924
1534	29.938845921	10.0.2.15	157.140.2.32	ICP	74 [TCP Retransmission] 34496 — 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=3310146686 TSecr=0 WS=1024

[»] Frame 1526: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface ethθ, id 0

No.	Time	Source	Destination	Protocol	Length Info
	6 21.506780747		157.140.2.32	TCP	74 [TCP Retransmission] 34486 - 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=3310138254 TSecr=0 WS=1024
					74 [TCP Retransmission] 34496 → 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=3310138483 TSecr=0 WS=1024
			157.140.2.32		74 [TCP Retransmission] 34492 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=3310138483 TSecr=0 WS=1024
	9 21.735615634		157.140.2.32	TCP	74 [TCP Retransmission] 34490 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=3310138483 TSecr=0 WS=1024
	0 22.502941118		104.76.210.90	TCP	54 [TCP Keep-Alive] 42190 - 80 [ACK] Seq=370 Ack=889 Win=63936 Len=0
	1 22.503852065		10.0.2.15	TCP	60 [TCP Keep-Alive ACK] 80 → 42190 [ACK] Seq=889 Ack=371 Win=65535 Len=0
	2 22.763859706		13.249.112.123	TCP	54 [TCP Keep-Alive] 35100 - 443 [ACK] Seq=1325 Ack=5945 Win=63900 Len=0
		13.249.112.123	10.0.2.15	TCP	60 [TCP Keep-Alive ACK] 443 - 35100 [ACK] Seq=5945 Ack=1326 Win=65535 Len=0
	4 23.785816575		74.125.21.94	TCP	54 TCP Keep-Alive] 48068 - 80 [ACK] Seq=377 Ack=702 Win-63791 Len=0
	5 23.786856047 6 24.554741267		10.0.2.15 104.20.150.16	TCP TCP	60 [TCP Keep-Alive ACK] 80 - 48068 [ACK] Seq-702 Ack=378 Win=65535 Len=0
	7 24.555329552		104.20.150.16	TCP	54 [TCP Keep-Alive] 42290 - 80 [ACK] Seq=290 Ack=871 Win=63510 Len=0 60 [TCP Keep-Alive ACK] 80 - 42290 [ACK] Seq=871 Ack=291 Win=65535 Len=0
	8 24.823272495		157.140.2.32	TCP	00 [TCP RetP-RIIVE ACK] 00 -4 42290 [ACK] Seq-5/1 ACK=291 WIN=05535 LENEO 74 [TCP Retransmission] 34452 -80 [SYN] Seq-5 WIN=64240 Lene] MSS=1460 SACK PERM=1 TSVal=8310141571 TSecr=0 WS=1024
	9 25.068506053		72,21,91,29	TCP	54 [TCP Keep-Alive] 57292 - 80 [ACK] Seq=742 Ack=1407 Win=63920 Len=0
	0 25.069883092		10.0.2.15	TCP	60 [TCP Keep-Alive ACK] 80 - 57292 [ACK] Seq-1407 Ack-743 Win-65535 Len=0
	1 28.341688931		10.0.2.15	TCP	60 80 — 34456 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1460
	2 28.342281875		157.140.2.32	TCP	54 34456 - 80 [ACK] Seq=1 Ack=1 Win=64240 Len=0
152	3 28.592419847	157.140.2.32	10.0.2.15	TCP	60 80 - 34474 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1460
152	4 28.592467785	10.0.2.15	157.140.2.32	TCP	54 34474 - 80 [RST] Seg=1 Win=0 Len=0
152	5 28.651227377	10.0.2.15	157.140.2.32		74 [TCP Retransmission] 34460 - 80 [SYN] Seg=0 Win=64240 Len=0 MSS=1460 SACK PERM=1 TSval=3310145399 TSecr=0 WS=1024
L 152	6 28.651873331	10.0.2.15	157.140.2.32	TCP	74 TCP Retransmission 34462 - 80 SYN Seg=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=3310145399 TSecr=0 WS=1024
	7 28.652099834		157.140.2.32	TCP	74 [TCP Retransmission] 34464 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=3310145400 TSecr=0 WS=1024
	8 28.652479798		157.140.2.32		74 [TCP Retransmission] 34466 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=3310145400 TSecr=0 WS=1024
	9 28.652729474		108.177.122.94	TCP	54 [TCP Keep-Alive] 33170 → 80 [ACK] Seq=1888 Ack=3509 Win=63791 Len=0
		108.177.122.94	10.0.2.15	TCP	60 [TCP Keep-Alive ACK] 80 → 33170 [ACK] Seq=3509 Ack=1889 Win=65535 Len=0
	1 29.739248455		157.140.2.32	TCP	74 [TCP Retransmission] 34486 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=3310146487 TSecr=0 WS=1024
	2 29.938597978		157.140.2.32	TCP	74 [TCP Retransmission] 34490 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=3310146686 TSecr=0 WS=1024
	3 29.938747845		157.140.2.32	TCP	74 [TCP Retransmission] 34492 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSVal=3310146686 TSecr=0 WS=1024
153	4 29.938845921	10.0.2.15	157.140.2.32	TCP	74 [TCP Retransmission] 34496 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=3310146686 TSecr=0 WS=1024
▶ Frame	e 1526: 74 bytes	on wire (592 bits),	74 bytes captured (5	92 bits)	on interface eth0, id 0

3. The website is unencrypted because it uses http.

```
52 54 00 12 35 02 08 00
                                27 46 72 c1 08 00 45 00
                                                           RT - - 5 - - -
                                                           ·;··@·@·
      01 3b f3 13 40 00 40 06
                                9a ee 0a 00 02 0f 9d 8c
      02 20 86 c2 00 50 dd 19
                                3f 35 00 30 60 e9 50 18
                                                           · · · · P · · ?
     f9 9c ac e8 00 00 47 45
                                54 20 2f 6d 69 73 63 2f
                                                           · · · · · · GE T /
     66 65 65 64 2e 70 6e 67
                                20 48 54 54 50 2f 31 2e
                                                           feed.png HTTP/
     31 0d 0a 48 6f 73 74 3a
                                20 77 65 65 76 69 6c 2e
                                                           1 · · Host:
      69 6e 66 6f 0d 0a 55 73
                                65 72 2d 41 67 65 6e 74
                                                           info∵Us er-
0070
      3a 20 4d 6f 7a 69 6c 6c
                                61 2f 35 2e 30 20 28 58
                                                           : Mozill a/5.0
      31 31 3b 20 4c 69 6e 75
                                78 20 78 38 36 5f 36 34
                                                           11; Linu x
                                                           ; rv:78. 0)
      3b 20 72 76 3a 37 38 2e
                                30 29 20 47 65 63 6b 6f
      2f 32 30 31 30 30 31 30
                                31 20 46 69 72 65 66 6f
                                                           /2010010 1
      78 2f 37 38 2e 30 0d 0a
                                                           x/78.0 · · Accept:
                                41 63 63 65 70 74 3a 20
                                                           image/we bp, */
00c0
     69 6d 61 67 65 2f 77 65
                                62 70 2c 2a 2f 2a 0d 0a
     41 63 63 65 70 74 2d 4c
                                61 6e 67 75 61 67 65 3a
                                                           Accept-L
                                                            en-US, e
00e0
     20 65 6e 2d 55 53 2c 65
                                6e 3b 71 3d 30 2e 35 0d
00f0
      0a 41 63 63 65 70 74 2d
                                45 6e 63 6f 64 69 6e 67
                                                           · Accept -
      3a 20 67 7a 69 70 2c 20
                                64 65 66 6c 61 74 65 0d
                                                           : gzip,
0110 0a 43 6f 6e 6e 65 63 74
                                69 6f 6e 3a 20 6b 65 65
                                                            ·Connect ion:
```



- 7. Anyone can see the traffic that goes to and from the website. If someone were to attempt to log in, then their information would be visible.
- 8. This site uses https. This means that the traffic is encrypted. Wireshark cannot display the pictures.