



TECNOLOGICO NACIONAL DE MEXICO

INSTITUTO TECNOLÓGICO DE CANCÚN

FUNDAMENTOS DE TELECOMUNICACIONES

Ingeniería en Sistemas Computacionales

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DOCENTE: ING. ISMAEL JIMENEZ SANCHEZ

ACTIVIDAD

“LABORATORIO 8”

UNIDAD 3

1)

http-slow101.pcapng

Archivo Edición Visualización Ir Captura Analizar Estadísticas Telefonía Wireless Herramientas Ayuda

Aplique un filtro de visualización: <Ctrl>F

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	24.6.173.220	69.4.231.53	TCP	54	12592 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16322 Len=0
2	0.003434	24.6.173.220	69.4.231.53	TCP	54	12591 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16425 Len=0
3	0.003499	24.6.173.220	69.4.231.53	TCP	54	12595 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16425 Len=0
4	0.003534	24.6.173.220	69.4.231.53	TCP	54	12590 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16425 Len=0
5	0.003568	24.6.173.220	69.4.231.53	TCP	54	12594 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16254 Len=0
12	0.100110	24.6.173.220	69.4.231.53	TCP	54	12607 → 80 [ACK] Seq=1 Ack=1 Win=65700 Len=0
16	18.290883	24.6.173.220	69.4.231.53	TCP	54	12607 → 80 [FIN, ACK] Seq=641 Ack=1 Win=65700 Len=0
19	18.399804	24.6.173.220	69.4.231.53	TCP	54	12608 → 80 [ACK] Seq=1 Ack=1 Win=65700 Len=0
25	36.455454	24.6.173.220	69.4.231.53	TCP	54	12608 → 80 [ACK] Seq=641 Ack=348 Win=65352 Len=0
28	36.463671	24.6.173.220	69.4.231.53	TCP	54	12593 → 80 [RST, ACK] Seq=1 Ack=335 Win=0 Len=0

> Frame 1: 54 bytes on wire (432 bits), 54 bytes captured (432 bits) on interface unknown, id 0
> Ethernet II, Src: HewlettP_a7:bf:a3 (d4:85:64:a7:bf:a3), Dst: Cadant_31:bb:c1 (00:01:5c:31:bb:c1)
> Internet Protocol Version 4, Src: 24.6.173.220, Dst: 69.4.231.53
> Transmission Control Protocol, Src Port: 12592, Dst Port: 80, Seq: 1, Ack: 1, Len: 0

0000 00 01 5c 31 bb c1 d4 85 64 a7 bf a3 08 00 45 00 ...1....d.....E:
0010 00 28 59 68 40 00 00 06 00 00 18 06 ad dc 45 04 ..(Yh@.....E:
0020 e7 35 31 30 00 50 6e 37 28 cc ce 3f 0a 8d 50 11 :510 Pn7 (...?..P:
0030 3f c2 f2 36 00 00 ?..6..

Paquetes: 1101 · Mostrado: 1101 (100.0%) Perfi: wireshark101

12:01 p. m.
01/12/2020

2)

http-slow101.pcapng

Archivo Edición Visualización Ir Captura Analizar Estadísticas Telefonía Wireless Herramientas Ayuda

Aplique un filtro de visualización: <Ctrl>F

No.	Time	Source	Destination	Protocol	Info
1	0.000000	24.6.173.220	69.4.231.53	TCP	12592 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16322 Len=0
2	0.003434	24.6.173.220	69.4.231.53	TCP	12591 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16425 Len=0
3	0.003499	24.6.173.220	69.4.231.53	TCP	12595 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16425 Len=0
4	0.003534	24.6.173.220	69.4.231.53	TCP	12590 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16425 Len=0
5	0.003568	24.6.173.220	69.4.231.53	TCP	12594 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16254 Len=0
12	0.100110	24.6.173.220	69.4.231.53	TCP	12607 → 80 [ACK] Seq=1 Ack=1 Win=65700 Len=0
16	18.290883	24.6.173.220	69.4.231.53	TCP	12607 → 80 [FIN, ACK] Seq=641 Ack=1 Win=65700 Len=0
19	18.399804	24.6.173.220	69.4.231.53	TCP	12608 → 80 [ACK] Seq=1 Ack=1 Win=65700 Len=0
25	36.455454	24.6.173.220	69.4.231.53	TCP	12608 → 80 [ACK] Seq=641 Ack=348 Win=65352 Len=0
28	36.463671	24.6.173.220	69.4.231.53	TCP	12593 → 80 [RST, ACK] Seq=1 Ack=335 Win=0 Len=0

> Frame 1: 54 bytes on wire (432 bits), 54 bytes captured (432 bits) on interface unknown, id 0
> Ethernet II, Src: HewlettP_a7:bf:a3 (d4:85:64:a7:bf:a3), Dst: Cadant_31:bb:c1 (00:01:5c:31:bb:c1)
> Internet Protocol Version 4, Src: 24.6.173.220, Dst: 69.4.231.53
> Transmission Control Protocol, Src Port: 12592, Dst Port: 80, Seq: 1, Ack: 1, Len: 0

0000 00 01 5c 31 bb c1 d4 85 64 a7 bf a3 08 00 45 00 ...1....d.....E:
0010 00 28 59 68 40 00 00 06 00 00 18 06 ad dc 45 04 ..(Yh@.....E:
0020 e7 35 31 30 00 50 6e 37 28 cc ce 3f 0a 8d 50 11 :510 Pn7 (...?..P:
0030 3f c2 f2 36 00 00 ?..6..

Paquetes: 1101 · Mostrado: 1101 (100.0%) Perfi: wireshark101

12:05 p. m.
01/12/2020

3)

Wireshark capture of http-slow101.pcapng. The packet list shows a TCP segment (No. 354) with the following details:

- Time: 118.354
- Source: 24.6.173.220
- Destination: 69.4.231.53
- Protocol: TCP
- Info: 12609 → 80 [FIN, ACK] Seq=1971 Ack=151255 Win=65700 Len=0

The packet details pane shows the following structure:

- Ethernet II, Src: HewlettP_a7:bfa3 (d4:85:64:a7:bfa3), Dst: Cadant_31:bb:c1 (00:01:5c:31:bb:c1)
- Internet Protocol Version 4, Src: 24.6.173.220, Dst: 69.4.231.53
- Transmission Control Protocol, Src Port: 12609, Dst Port: 80, Seq: 1971, Ack: 151255, Len: 0

The packet bytes pane shows the raw data in hexadecimal and ASCII:

```

0000 00 01 5c 31 bb c1 d4 85 64 a7 bf a3 00 00 45 00  ..\1....d....E:
0010 00 28 5a 3c 40 00 00 06 00 00 18 06 ad dc 45 04  (Z@.....E:
0020 e7 35 31 41 00 50 f0 1e 4a c2 07 ec 42 a2 50 11  51A P...J...B:P-
0030 40 29 f2 36 00 00                                @).6...
  
```

4)

Wireshark capture of http-slow101.pcapng. The packet list shows a TCP segment (No. 1) with the following details:

- Time: 0.001
- Source: 24.6.173.220
- Destination: 69.4.231.53
- Protocol: TCP
- Info: 12592 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16322 Len=0

The packet details pane shows the following structure:

- Ethernet II, Src: HewlettP_a7:bfa3 (d4:85:64:a7:bfa3), Dst: Cadant_31:bb:c1 (00:01:5c:31:bb:c1)
- Internet Protocol Version 4, Src: 24.6.173.220, Dst: 69.4.231.53
- Transmission Control Protocol, Src Port: 12592, Dst Port: 80, Seq: 1, Ack: 1, Len: 0

The packet bytes pane shows the raw data in hexadecimal and ASCII:

```

0000 00 01 5c 31 bb c1 d4 85 64 a7 bf a3 00 00 45 00  ..\1....d....E:
0010 00 28 59 68 40 00 00 06 00 00 18 06 ad dc 45 04  (Yh@.....E:
0020 e7 35 31 30 00 50 6e 37 28 cc ce 3f 0a 0d 50 11  510 Pn7 (...P-
0030 3f c2 f2 36 00 00                                ?..6...
  
```

5)

http-slow101.pcapng

Archivo Edición Visualización Ir Captura Analizar Estadísticas Telefonía Wireless Herramientas Ayuda

Aplique un filtro de visualización ... <Ctrl-F>

No.	Time	Source	Destination	Protocol	Time since previous frame in this TCP stream	Info
11	0	69.4.231.53	24.6.173.220	TCP	0.095919000	80 → 12607 [SYN, ACK] Seq=0 Ack=1 Win=5840 Len=0 MSS=1460 SACK_PERM=1 WS=512
10	0	69.4.231.53	24.6.173.220	TCP	0.096381000	80 → 12591 [ACK] Seq=1 Ack=2 Win=14 Len=0
9	0	69.4.231.53	24.6.173.220	TCP	0.096237000	80 → 12594 [ACK] Seq=1 Ack=2 Win=14 Len=0
8	0	69.4.231.53	24.6.173.220	TCP	0.096303000	80 → 12595 [ACK] Seq=1 Ack=2 Win=14 Len=0
7	0	69.4.231.53	24.6.173.220	TCP	0.095410000	80 → 12590 [ACK] Seq=1 Ack=2 Win=24 Len=0
6	0	24.6.173.220	69.4.231.53	TCP	0.000000000	12607 → 80 [SYN] Seq=0 Win=8192 Len=0 MSS=1460 WS=4 SACK_PERM=1
5	0	24.6.173.220	69.4.231.53	TCP	0.000000000	12594 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16254 Len=0
4	0	24.6.173.220	69.4.231.53	TCP	0.000000000	12590 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16425 Len=0
3	0	24.6.173.220	69.4.231.53	TCP	0.000000000	12595 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16425 Len=0

Acknowledgment number (raw): 3460237965
 0101 = Header Length: 20 bytes (5)
 > Flags: 0x011 (FIN, ACK)
 Window: 16322
 [Calculated window size: 16322]
 [Window size scaling factor: -1 (unknown)]
 Checksum: 0xf236 [unverified]
 [Checksum Status: Unverified]
 Urgent Pointer: 0
 [Timestamps]
 [Time since first frame in this TCP stream: 0.000000000 seconds]
 [Time since previous frame in this TCP stream: 0.000000000 seconds]

0000 00 01 5c 31 bb c1 d4 85 64 a7 bf a3 08 00 45 00 ...1... d....E.
 0010 00 28 59 68 40 00 00 06 00 00 18 06 ad dc 45 04 ..(Yh... ..E.
 0020 e7 35 31 30 00 50 6e 37 28 cc ce 3f 0a 8d 50 11 :510 Pn7 (...?..P.
 0030 3f c2 f2 36 00 00 ?..6..

Time delta from previous frame in this TCP stream (tcp.time_delta) Paquetes: 1101 - Mostrado: 1101 (100.0%) Perfi: wireshark101

12:18 p. m. 01/12/2020

6)

http-slow101.pcapng

Archivo Edición Visualización Ir Captura Analizar Estadísticas Telefonía Wireless Herramientas Ayuda

Aplique un filtro de visualización ... <Ctrl-F>

No.	Time	TCP DELTA	Source	Destination	Protocol	Info
1	0	0.000000000	24.6.173.220	69.4.231.53	TCP	12592 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16322 Len=0
2	0	0.000000000	24.6.173.220	69.4.231.53	TCP	12591 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16425 Len=0
3	0	0.000000000	24.6.173.220	69.4.231.53	TCP	12595 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16425 Len=0
4	0	0.000000000	24.6.173.220	69.4.231.53	TCP	12590 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16425 Len=0
5	0	0.000000000	24.6.173.220	69.4.231.53	TCP	12594 → 80 [FIN, ACK] Seq=1 Ack=1 Win=16254 Len=0
6	0	0.000000000	24.6.173.220	69.4.231.53	TCP	12607 → 80 [SYN] Seq=0 Win=8192 Len=0 MSS=1460 WS=4 SACK_PERM=1
17	0	0.000000000	24.6.173.220	69.4.231.53	TCP	12608 → 80 [SYN] Seq=0 Win=8192 Len=0 MSS=1460 WS=4 SACK_PERM=1
26	0	0.000000000	69.4.231.53	24.6.173.220	TCP	80 → 12593 [PSH, ACK] Seq=1 Ack=1 Win=17 Len=334 [TCP segment of a reassembled PDU]
44	0	0.000000000	24.6.173.220	69.4.231.53	TCP	12609 → 80 [SYN] Seq=0 Win=8192 Len=0 MSS=1460 WS=4 SACK_PERM=1

0101 = Header Length: 20 bytes (5)
 > Flags: 0x011 (FIN, ACK)
 Window: 16322
 [Calculated window size: 16322]
 [Window size scaling factor: -1 (unknown)]
 Checksum: 0xf236 [unverified]
 [Checksum Status: Unverified]
 Urgent Pointer: 0
 [Timestamps]
 [Time since first frame in this TCP stream: 0.000000000 seconds]
 [Time since previous frame in this TCP stream: 0.000000000 seconds]

0000 00 01 5c 31 bb c1 d4 85 64 a7 bf a3 08 00 45 00 ...1... d....E.
 0010 00 28 59 68 40 00 00 06 00 00 18 06 ad dc 45 04 ..(Yh... ..E.
 0020 e7 35 31 30 00 50 6e 37 28 cc ce 3f 0a 8d 50 11 :510 Pn7 (...?..P.
 0030 3f c2 f2 36 00 00 ?..6..

http-slow101.pcapng Paquetes: 1101 - Mostrado: 1101 (100.0%) Perfi: wireshark101

12:27 p. m. 01/12/2020