



TECNOLÓGICO  
NACIONAL DE MÉXICO



**INSTITUTO TECNOLÓGICO DE CANCÚN**

**INGENIERÍA EN  
SISTEMAS COMPUTACIONALES**

**FUNDAMENTOS DE TELECOMUNICACIONES**

**NOMBRE DEL ALUMNO:**

**CHAN BURGOS JOSE REYES**

**HORARIO**

**LUNES A JUEVES**

**5:00 PM – 6:00 PM**

**PROFESOR**

**ING. ISMAEL JIMENEZ SANCHEZ**



TECNOLOGICO  
NACIONAL DE MEXICO



## LABORATORIO 27.

FileEditViewCaptureAnalyzeStatisticsTelephonyWindowsToolsHelp

Icons a router filter <Ctrl>F

No.	Time	Source	Destination	Protocol	Length	Time since last seen in this TCP stream	Coloring Rule Name	Info
1	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	TCP	66	0.000000000 HTTP	61598 → 61598 [SYN] Seq=1502162 Len=0 Window=1460 MSS=1460 SACK_PERM=1	
2	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	TCP	66	0.000000000 HTTP	61598 → 61598 [ACK] Seq=1502162 Len=0 Window=1460 MSS=1460 SACK_PERM=1	
3	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	TCP	66	0.000000000 HTTP	61598 → 61598 [ACK] Seq=1502162 Len=0 Window=1460 MSS=1460 SACK_PERM=1	
4	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	TCP	66	0.000000000 HTTP	61598 → 61598 [ACK] Seq=1502162 Len=0 Window=1460 MSS=1460 SACK_PERM=1	
5	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	TCP	66	0.000000000 HTTP	61598 → 61598 [ACK] Seq=1502162 Len=0 Window=1460 MSS=1460 SACK_PERM=1	
6	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	TCP	66	0.000000000 HTTP	61598 → 61598 [ACK] Seq=1502162 Len=0 Window=1460 MSS=1460 SACK_PERM=1	
7	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	TCP	1109	0.000000000 HTTP	HTTP/1.1 200 OK (application/json)	
8	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	TCP	66	0.278030000 HTTP	61598 → 61598 [ACK] Seq=1502162 Len=0 Window=1460	
9	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	76		Standard query 0x8164 to 192.168.1.1	
10	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	214		Standard query response 0x8164 from 192.168.1.1	
11	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	66		Standard query 0x8164 to 192.168.1.1	
12	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	66		Standard query response 0x8164 from 192.168.1.1	
13	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	66		Standard query 0x8164 to 192.168.1.1	
14	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	66		Standard query response 0x8164 from 192.168.1.1	
15	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	66		Standard query 0x8164 to 192.168.1.1	
16	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	66		Standard query response 0x8164 from 192.168.1.1	
17	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	66		Standard query 0x8164 to 192.168.1.1	
18	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	66		Standard query response 0x8164 from 192.168.1.1	
19	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	66		Standard query 0x8164 to 192.168.1.1	
20	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	66		Standard query response 0x8164 from 192.168.1.1	
21	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	66		Standard query 0x8164 to 192.168.1.1	
22	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	66		Standard query response 0x8164 from 192.168.1.1	
23	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	66		Standard query 0x8164 to 192.168.1.1	
24	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	66		Standard query response 0x8164 from 192.168.1.1	
25	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	66		Standard query 0x8164 to 192.168.1.1	
26	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	66		Standard query response 0x8164 from 192.168.1.1	
27	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
28	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
29	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
30	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
31	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
32	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
33	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
34	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
35	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
36	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
37	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
38	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
39	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
40	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
41	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
42	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
43	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
44	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
45	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
46	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
47	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
48	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
49	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
50	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
51	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
52	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
53	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
54	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
55	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
56	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
57	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
58	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
59	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
60	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
61	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
62	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
63	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
64	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
65	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
66	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
67	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
68	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
69	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
70	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
71	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
72	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
73	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
74	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
75	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
76	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
77	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
78	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
79	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
80	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
81	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
82	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
83	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
84	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
85	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
86	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
87	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
88	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
89	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
90	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
91	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
92	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
93	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
94	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
95	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
96	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query response 0x8164 from 192.168.1.1	
97	0.002-0.114	204-61-173-228.hdsl.ca.comcast	204-61-173-228.hdsl.ca.comcast	DNS	73		Standard query 0x8164 to 192.168.1.1	
98	0.002-0.114							

```
> Frame 1: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface \Device\NPF_{6879FEC0-FF70-4070-9684-E8FF380A30B0}, Id 0
Ethernet II, Src: c-24-6-173-220.hsd1.ca.comcast.net (d8:05:64:a7:bfa3), Dst: Cadent_31:b0:c1 (00:10:5c:21:b0:c1)
Internet Protocol Version 4, Src: 24.6.173.220 (24.6.173.220), Dst: ghs1.google.com (173.194.79.121)
Transmission Control Protocol, Src Port: 61568, Dst Port: 80, Seq: 8, Len: 0
```

```
0000 00 01 5c 11 10 c1 04 05 64 27 bf 23 00 00 45 00  A.....E
0010 00 34 2a 71 40 00 00 00 00 00 3f 04 06 c2 04 00  8.....8
0020 4f 79 40 5e 00 10 24 00 15 b2 00 00 00 00 30 02  Oy 5% .....
0030 20 00 c3 04 00 00 62 04 05 04 61 03 03 02 01 01  0.....0
```

[illegible]

```
> Frame 61: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on Interface \\Device\\NPF_{6870F8C0-FF70-4978-06E4-EEFF300A080F}, Id
> Ethernet II, Src: C-24-6-173-226.hsd1.ca.comcast.net (04:8d:6a:47:b0:fa), Dst: Cadant311b1c1 (00:01:5c:31:1b:0c)
> Internet Protocol Version 4, Src: C-24-6-173-226.hsd1.ca.comcast.net (24.6.173.226), Dst: log.china.cn (210.72.21.11)
> Transmission Control Protocol, Src Port: 65491, Dst Port: 80, Seq: 8, Len: 0
```

```
0000 00 01 5c 31 00 c1 64 01 04 a7 1f a3 00 00 45 00 12 .....E
0010 00 04 12 0c 00 00 00 00 00 00 10 05 dc dc a2 40 04 .....H
0020 13 06 fd a1 00 50 a1 dc 01 00 00 00 00 00 00 00 02 .....P.....
0030 20 00 ad 5c 00 00 02 04 05 01 01 03 02 01 01 .....
0040 04 02
```