

INSTITUTO TECNOLÓGICO DE CANCUN



Nombre De La Materia: Fundamentos De Telecomunicaciones

Nombre De La Unidad: Sistemas de comunicación

N.º De Actividad: Laboratorio 18

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Paso 1:

The screenshot displays the Wireshark network protocol analyzer interface. The top menu bar includes File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, and Help. The toolbar contains various icons for file operations, packet navigation, and analysis. The main window is divided into three panes:

- Packet List:** Shows a list of captured packets. The first packet (No. 1) is a DNS Standard query for 'www.chappellu.com' from 24.6.173.220 to 75.75.75.75. The second packet (No. 2) is the corresponding response.
- Packet Details:** Provides a hierarchical view of the selected packet's structure. For the first packet, it shows Ethernet II, Internet Protocol Version 4, User Datagram Protocol, and Domain Name System (query).
- Packet Bytes:** Displays the raw data of the selected packet in hexadecimal and ASCII format.

The status bar at the bottom indicates that 28 packets are displayed (100.0%) and the profile is set to Default.

Paso 2:

The image shows the Wireshark network protocol analyzer interface. The top pane displays a list of captured packets. The bottom pane shows the details of the selected packet (No. 17), which is a DNS Standard query response. A context menu is open over the packet list, with the 'Prepare as Filter' option selected. The filter expression 'dns.flags.rcode == 3' is shown in the bottom status bar.

No.	Time	Source	Destination	Protocol	Length	Info
7	0.000195	24.6.173.220	198.66.239.146	TCP	54	14845 → 80 [ACK] Seq=1 Ack=1 Win=65700 Len=0
8	0.000950	24.6.173.220	198.66.239.146	HTTP	357	GET /whatsup.html HTTP/1.1
9	0.021702	198.66.239.146	24.6.173.220	HTTP	634	HTTP/1.1 404 Not Found (text/html)
10	0.077363	24.6.173.220	198.66.239.146	HTTP	356	GET /favicon.ico HTTP/1.1
11	0.018876	198.66.239.146	24.6.173.220	HTTP	1514	HTTP/1.1 200 OK (image/x-icon)
12	0.001235	198.66.239.146	24.6.173.220	HTTP	1514	Continuation
13	0.000004	198.66.239.146	24.6.173.220	HTTP	1514	Continuation
14	0.000007	198.66.239.146	24.6.173.220	HTTP	1514	Continuation
15	0.000004	198.66.239.146	24.6.173.220	HTTP	260	Continuation
16	0.000235	24.6.173.220	198.66.239.146	TCP	54	14845 → 80 [ACK] Seq=606 Ack=6627 Win=65700 Len=0
17	9.789222	24.6.173.220	75.75.75.75	DNS	79	Standard query 0x8e30 A www.chappelluuu.com
18	0.015064	75.75.75.75	24.6.173.220	DNS	152	Standard query response 0x8e30 No such name A www.
19	5.199498	24.6.173.220	198.66.239.146	TCP	54	14845 → 80 [FIN, ACK] Seq=606 Ack=6627 Win=65700

Details of packet 17 (DNS Standard query response):

- Questions: 1
- Answer RRs: 0
- Authority RRs: 1
- Additional RRs: 0
- Queries
- Authoritative nameservers
- [\[Request In: 17\]](#)

Filter: dns.flags.rcode == 3

Status: Reply code (dns.flags.rcode), 2 byte(s) | Packets: 28 · Displayed: 28 (100.0%) | Profile: Default

Paso 3:

The image shows the Wireshark network traffic analysis interface. The top menu bar includes File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, and Help. The toolbar contains various icons for packet capture and analysis. The filter bar at the top shows the filter `dns.flags.rcode == 3`.

The packet list pane displays the following packets:

No.	Time	Source	Destination	Protocol	Length	Info
7	0.000195	24.6.173.220	198.66.239.146	TCP	54	14845 → 80 [ACK] Seq=1 Ack=1 Win=65700 Len=0
8	0.000950	24.6.173.220	198.66.239.146	HTTP	357	GET /whatsup.html HTTP/1.1
9	0.021702	198.66.239.146	24.6.173.220	HTTP	634	HTTP/1.1 404 Not Found (text/html)
10	0.077363	24.6.173.220	198.66.239.146	HTTP	356	GET /favicon.ico HTTP/1.1
11	0.018876	198.66.239.146	24.6.173.220	HTTP	1514	HTTP/1.1 200 OK (image/x-icon)
12	0.001235	198.66.239.146	24.6.173.220	HTTP	1514	Continuation
13	0.000004	198.66.239.146	24.6.173.220	HTTP	1514	Continuation
14	0.000007	198.66.239.146	24.6.173.220	HTTP	1514	Continuation
15	0.000004	198.66.239.146	24.6.173.220	HTTP	260	Continuation
16	0.000235	24.6.173.220	198.66.239.146	TCP	54	14845 → 80 [ACK] Seq=606 Ack=6627 Win=65700 Len=0
17	9.789222	24.6.173.220	75.75.75.75	DNS	79	Standard query 0x8e30 A www.chappelluuu.com
18	0.015064	75.75.75.75	24.6.173.220	DNS	152	Standard query response 0x8e30 No such name A www.
19	5.199498	24.6.173.220	198.66.239.146	TCP	54	14845 → 80 [FIN, ACK] Seq=606 Ack=6627 Win=65700

The packet details pane shows the selected packet (Frame 9) with the following information:

- Frame 9: 634 bytes on wire (5072 bits), 634 bytes captured (5072 bits) on interface \Device\NPF_{6E79FEC0-FF79-4970-96E4-EEFF300A9B}
- Ethernet II, Src: Cadant_31:bb:c1 (00:01:5c:31:bb:c1), Dst: HewlettP_a7:bf:a3 (d4:85:64:a7:bf:a3)
- Internet Protocol Version 4, Src: 198.66.239.146, Dst: 24.6.173.220
- Transmission Control Protocol, Src Port: 80, Dst Port: 14845, Seq: 1, Ack: 304, Len: 580
- Hypertext Transfer Protocol
 - HTTP/1.1 404 Not Found

The packet bytes pane shows the raw data of the selected packet, with a hex dump and ASCII representation. The ASCII representation shows the HTML response body, which includes the text "404 Not Found".

The status bar at the bottom indicates that the selected packet is a "Text item (text), 24 byte(s)" and that there are 28 packets displayed (100.0%).

Paso 4:

The image shows a Wireshark packet capture window titled "http-errors101.pcapng". The packet list pane shows a single packet, No. 18, at time 0.000000, from source 75.75.75.75 to destination 24.6.173.220, protocol DNS, length 152. The packet details pane shows the following structure:

- Frame 18: 152 bytes on wire (1216 bits), 152 bytes captured (1216 bits) on interface \Device\NPF_{6E79FEC0-FF79-4970-96E4-EEFF300A9} /
- Ethernet II, Src: Cadant_31:bb:c1 (00:01:5c:31:bb:c1), Dst: HewlettP_a7:bf:a3 (d4:85:64:a7:bf:a3)
- Internet Protocol Version 4, Src: 75.75.75.75, Dst: 24.6.173.220
- User Datagram Protocol, Src Port: 53, Dst Port: 57585
- Domain Name System (response)
 - Transaction ID: 0x8e30
 - Flags: 0x8183 Standard query response, No such name
 - 1... .. = Response: Message is a response
 - .000 0... .. = Opcode: Standard query (0)
 -0.. .. = Authoritative: Server is not an authority for domain
 -0. = Truncated: Message is not truncated
 -1 = Recursion desired: Do query recursively
 -1... .. = Recursion available: Server can do recursive queries

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

```
0000 d4 85 64 a7 bf a3 00 01 5c 31 bb c1 08 00 45 40 ..d.....\1....E@
0010 00 8a 00 00 40 00 3b 11 e2 aa 4b 4b 4b 4b 18 06 ....@.;..KKKK..
0020 ad dc 00 35 e0 f1 00 76 28 a4 8e 30 81 83 00 01 ..5...v(..0...
0030 00 00 00 01 00 00 03 77 77 77 0b 63 68 61 70 70 .....w ww.chapp
0040 65 6c 6c 75 75 75 03 63 6f 6d 00 00 01 00 01 c0 elluuu.c om.....
0050 1c 00 06 00 01 00 00 03 84 00 3d 01 61 0c 67 74 .....=a.gt
0060 6c 64 2d 73 65 72 76 65 72 73 03 6e 65 74 00 05 ld-serve rs.net..
0070 6e 73 74 6c 64 0c 76 65 72 69 73 69 67 6e 2d 67 nstld.ve risign-g
0080 72 73 c0 1c 50 94 1d b8 00 00 07 08 00 00 03 84 rs..P.....
0090 00 09 3a 80 00 01 51 80 ...:...Q.
```

The status bar at the bottom indicates "Packets: 28 · Displayed: 1 (3.6%)" and "Profile: Default".

