ĐẠI HỌC QUỐC GIA THÀNH PHỐ HỒ CHÍ MINH TRƯỜNG ĐẠI HỌC BÁCH KHOA KHOA KHOA HỌC VÀ KỸ THUẬT MÁY TÍNH



MẠNG MÁY TÍNH THỰC HÀNH - CO3094

Báo cáo:

Lab1a

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1 Lab1a

1.1 Question 1

List 3 different protocols that appear in the protocol column in the unfiltered packet-listing window in step 7 above.

Answer:

3 protocols that appear are: TCP, TLSv1.2 and UDP.

No.	Time	Source	Destination	Protocol L	ength Info
	49 12.624518	10.230.69.50	142.250.198.202	UDP	71 64419 → 443 Len=29
	50 12.677574	142.250.198.202	10.230.69.50	UDP	67 443 → 64419 Len=25
	51 12.890982	10.230.69.50	142.250.198.202	UDP	71 64419 → 443 Len=29
	52 12.943677	142.250.198.202	10.230.69.50	UDP	67 443 → 64419 Len=25
	53 13.158652	10.230.69.50	142.250.198.202	UDP	71 64419 → 443 Len=29
	54 13.210650	142.250.198.202	10.230.69.50	UDP	67 443 → 64419 Len=25
	55 13.614420	10.230.69.50	142.250.198.202	UDP	71 64419 → 443 Len=29
	56 13.666818	142.250.198.202	10.230.69.50	UDP	67 443 → 64419 Len=25
	57 14.476398	10.230.69.50	142.250.198.202	UDP	71 64419 → 443 Len=29
	58 14.528757	142.250.198.202	10.230.69.50	UDP	67 443 → 64419 Len=25
	59 14.653816	10.230.69.50	142.250.76.227	UDP	144 60991 → 443 Len=102
	60 14.711459	142.250.76.227	10.230.69.50	UDP	168 443 → 60991 Len=126
	61 14.711596	142.250.76.227	10.230.69.50	UDP	64 443 → 60991 Len=22
	62 14.712352	10.230.69.50	142.250.76.227	UDP	77 60991 → 443 Len=35
	63 14.779709	142.250.76.227	10.230.69.50	UDP	66 443 → 60991 Len=24
	64 15.852750	10.230.69.50	142.250.198.234	TCP	55 50981 → 443 [ACK] Seq=1 Ack=1 Win=509 Len=1
	65 15.906505	142.250.198.234	10.230.69.50	TCP	68 443 → 50981 [ACK] Seq=1 Ack=2 Win=1047 Len=0 SLE=1 SRE=2
	66 16.134497	10.230.69.50	142.250.198.202	UDP	71 64419 → 443 Len=29
	67 16.188174	142.250.198.202	10.230.69.50	UDP	67 443 → 64419 Len=25
	68 17.127780	34.120.52.64	10.230.69.50	TLSv1.2	84 Application Data[Malformed Packet]
	69 17.129928	10.230.69.50	34.120.52.64	TLSv1.2	85 Application Data
	70 17.186687	34.120.52.64	10.230.69.50	TCP	56 443 → 50400 [ACK] Seq=28 Ack=32 Win=1038 Len=0
	71 19.401653	10.230.69.50	142.250.198.202	UDP	71 64419 → 443 Len=29
L	72 19.454184	142.250.198.202	10.230.69.50	UDP	67 443 → 64419 Len=25

1.2 Question 2

How long did it take from when the HTTP GET message was sent until the HTTP OK reply was received? (By default, the value of the Time column in the packet listing window is the amount of time, in seconds, since Wireshark tracing began. To display the Time field in time-of-day format, select the Wireshark View pull down menu, then select Time Display Format, then select Time-of-day.)

Answer:

The GET was sent at 6.987752 and the OK was received at 6.995812. It took approximately 0.8060 seconds to go from HTTP ET to HTTP OK





What is the Internet address of the gaia.cs.umass.edu (also known as www.net.cs.umass.edu)? What is the Internet address of your computer?

Answer:

The IP address of the gaia.cs.umass.edu is 113.171.234.25 and the IP of my computer is 10.230.69.50

1.3 Question 4

Print the two HTTP messages (GET and OK) referred to in question 2 above. To do so, select Print from the Wireshark File command menu, and select the "Selected Packet Only" and "Print as displayed" radial buttons, and then click OK.

Answer:

```
No. Time Source Destination Protocol Length Info
249 6.987752 10.230.69.50 113.171.234.25 HTTP 208 GET /connecttest.txt HTTP/1.1
Frame 249: 208 bytes on wire (1664 bits), 208 bytes captured (1664 bits) on interface \Device\NPF_{68272D8F-0FB6-459B-A8CE-97C78398D204}, id 0
Ethernet II, Src: Intel_93:30:aa (54:6c:eb:93:30:aa), Dst: HewlettPacka_3a:8c:78 (40:a8:f0:3a:8c:78)
Internet Protocol Version 4, Src: 10.230.69.50, Dst: 113.171.234.25
Transmission Control Protocol, Src Port: 52644, Dst Port: 80, Seq: 1, Ack: 1, Len: 154
Hypertext Transfer Protocol
```

```
No. Time Source Destination Protocol Length Info
251 6.995812 113.171.234.25 10.230.69.50 HTTP 241 HTTP/1.1 200 OK (text/plain)
Frame 251: 241 bytes on wire (1928 bits), 241 bytes captured (1928 bits) on interface \Device\NPF_(68272D8F-0FB6-459B-A8CE-97C78398D204\), id 0
Ethernet II, Src: HewlettPacka_3a:8c:78 (40:a8:f0:3a:8c:78), Dst: Intel_93:30:aa (54:6c:eb:93:30:aa)
Internet Protocol Version 4, Src: 113.171.234.25, Dst: 10.230.69.50
Transmission Control Protocol, Src Port: 80, Dst Port: 52644, Seq: 1, Ack: 155, Len: 187
Hypertext Transfer Protocol
Line-based text data: text/plain (1 lines)
```