## aeirya mohammadi 97103779

1]				سوالات نظرى		
.,	a)	Dest Addr Rar		Link Interface		
		11100000 11100000 1110000x 11100001 otherwise	00xxxxxx 01000000 xxxxxxxx 1xxxxxxx	XXXXXXXX XXXXXXXX XXXXXXXX	XXXXXXXX XXXXXXXX XXXXXXXX	0 1 2 3 3
	b)	Address				Link Interface
		11001000 11100001 11100001	10010001 01000000 10000000	01010001 11000011 00010001	01010101 00111100 01110111	3 1 3
2]		Subnet+Host 10000000	01110111	00101000	0000000	[Sub]network All
		10000000 10000000 10000000 10000000 1000000	01110111 01110111 01110111 01110111 01110111	00101000 00101001 00101001 00101001 00101001	0000000 0000000 1000000 11111100 11111110	A B C D E
		Net ID 128.119.40.0/2 128.119.41.0/2 128.119.41.25 128.119.41.25	25 27/26 52/31			Sub-network A B C D E

a) the packet splits into ceil[(14000-20)/(3300-20)] = 5 parts, each of maximum size 3300 which are small enough to be also passed by the second router without fragmentation.

```
total payload: 14000 - 20 = 13980
# of parts = ceil(13980/3280) = 5
last frag size = 13980 - 3280 * 4 + 20 = 860 + 20 (overhead) = 880
4 fragment of size 3300, 1 of size 880
```

5 fragments exiting router 2

b) the first router splits the packet to packets of size 4480 (plus 20 overhead of header), making ceil((14000-20)/4500) = 4 packets of the following sizes:

```
last datagram fragment size = 14000 - 20 - 3*(4500-20) + 20 = 560 3 of size 4500, 1 of size 560
```

the former 3 will be dividend again at the router two. into fragments of following size:

packet 
$$1 = 3300$$
  
packet  $2 = (4500 - 20) - (3300 - 20) + 20 = 1220$ 

then the packets exiting router 2 will be: 1 of size 560, 3 of size 3300, 3 of size 1220 adding up to  $\underline{7}$ 

4]

350 - 20 (header) = 330 Bytes for payload nearest number divisible by 8 -> 328

#. of fragments = 900 / 328 = 2.74 -> 3

last frag size = 900 - 2\*328 + 20 = 244 + 20

part 1 offset = 328/8 = 41

frag #.		1	2	3
length frag flag offset	   	 348 1 0	348 1 41	264 0 82

5]

192.168.1.192/28 <-> 11111111 11111111 11111111 11110000 (subnet mask)

NAT translation table

WAN side	   LAN side
129.119.112.235: 5010	192.168.1.192: 3000
129.119.112.235: 5011	192.168.1.192: 3001
129.119.112.235: 5020	192.168.1.193: 3000
129.119.112.235: 5021	192.168.1.193: 3001
129.119.112.235: 5030	192.168.1.194: 4000
129.119.112.235: 5031	192.168.1.194: 4001

a sample packet P entering the router from internet:

source ip	source port	destination ip	destination port
176.213.40.12	80	129.119.112.235	5010

P will be forwarded to host A (listening at 192.168.1.192: 3000)

6]

- a) not necessarily. there's a chance the broadcast doesn't reach some nodes (and is lost). even if it does, there's always some delay and until the state is updated, packets are sent to "wrong" routers.
- b) still some are lost. so the routes aren't **always** correct but most of the time they are. there's still delay.
- c) the bigger the network gets there's more chance flooding causes heavy traffic and infinite looping so we can't really have such network (with no loss) but if we did, then this protocol works more correctly but still some bad routing could happen because of change of link states (change of costs/broken links) as we're broadcasting the previous change. but if the broadcast happens immediately (and without other change of network) this would be a usable protocol and there will probably be no need to rebroadcast states.

## سوالات عملى 1- IPv4

1] source ip: 192.168.43.29

2] TTL: 1

protocol: UDP (17)

3]

header len: 20 bytes

payload len: 56-20 = 36 bytes

4] no, it is exactly 56 bytes (datagram size)

TTL changes (incrementally) and that's to let the packet traverse further into internet (hop one more router each time). Dest port may vary. Identification value and checksum (obviously) also differ. Other labels stay the same since all sent packets (which are of the same size and content) are supposed to reach 'sharif.ir'.

- 7] starting from 50889 and going up by one for each UDP packet sent.
- 9] protocol: ICMP (1)
- 10] no, since they are probably sent by different routers.
- no, neither they share the same identification as the sent datagram nor they necessarily follow up each other numerically (though it's increasing, but not by one).

26 4.116013 8.8.4.4 192.168.43.29 DNS 85 Standard query response 0x9abf A sharif.ir A 81.31.186.54 53 57443 574 27 4.117148 192.168.43.29 181.31.186.54 UDP 70 50888 -33435 Len=28 50888 33435 334 28 4.118526 192.168.43.29 239.255.255.25 SSDP 217 M-SEARCH * HTTP/1.1 55476 190e 109e 29 4.118787 192.168.43.1 192.168.43.29 1CMP 98 Time-to-live exceeded (Time to live exceeded in transit) 50888 33435 334 30 4.119501 192.168.43.29 8.8.4.4 DNS 85 Standard query 0x1f38 PTR 1.43.168.192.in-addr.arpa 59337 53 53 31 4.189984 8.8.4.4 192.168.43.29 DNS 85 Standard query response 0x1f38 No such name PTR 1.43.168. 53 59337 593 32 4.199789 192.168.43.29 81.31.186.54 UDP 76 50888 - 33436 Len=28								
28 4.118526 192.168.43.29 239.255.255.250 SSDP 217 M-SEARCH * HTTP/1.1 55476 1900 190  - 29 4.1185787 192.168.43.1 192.168.43.29 ICKP 98 Time-to-live exceeded (Time to live exceeded in transit) 50888 33435 334  30 4.119501 192.168.43.29 8.8.4.4 DNS 85 Standard query 0x1f38 PTR 1.43.168.192.in-addr.arpa 59337 593  31 4.189984 8.8.4.4 192.168.43.29 DNS 85 Standard query response 0x1f38 No such name PTR 1.43.168. 53 59337 593								
- 29 4.118787 192.168.43.1 192.168.43.29 ICMP 98 Time-to-live exceeded (Time to live exceeded in transit) 50888 33435 334 119501 192.168.43.29 8.8.4.4 DNS 85 Standard query 0x1f38 PTR 1.43.168.192.in-addr.arpa 59337 53 53 14.189984 8.8.4.4 192.168.43.29 DNS 85 Standard query response 0x1f38 No such name PTR 1.43.16853 59337 5								
30 4.119501 192.168.43.29 8.8.4.4 DNS 85 Standard query 0x1f38 PTR 1.43.168.192.in-addr.arpa 59337 53 53 31 4.189984 8.8.4.4 192.168.43.29 DNS 85 Standard query response 0x1f38 No such name PTR 1.43.168 53 59337 593								
31 4.189984 8.8.4.4 192.168.43.29 DNS 85 Standard query response 0x1f38 No such name PTR 1.43.168_ 53 59337 593								
32 4.190789 192.168.43.29 81.31.186.54 UDP 70 50888 → 33436 Len=28 50888 33436 334								
33 4.192532 192.168.43.1 192.168.43.29 ICMP 98 Time-to-live exceeded (Time to live exceeded in transit) 50888 33436 334								
34 4.192736 192.168.43.29 81.31.186.54 UDP 70 50888 - 33437 Len=28 50888 33437 334								
35 4.194348 192.168.43.1 192.168.43.29 ICMP 98 Time-to-live exceeded (Time to live exceeded in transit) 50888 33437 334								
36 4.194556 192.168.43.29 81.31.186.54 UDP 70 50888 → 33438 Len=28 50888 33438 334								
37 4.525865 192.168.43.41 224.0.0.251 MDNS 439 Standard query 0x0000 PTR _airporttcp.local, "QM" ques 5353 5353								
38 4.530263 fe80::10c4:a65 ff02::fb MDNS 459 Standard query 0x00000 PTR _airporttcp.local, "QN" ques 5353 535								
39 4.686270 192.168.43.29 224.0.0.251 MDNS 208 Standard query response 0x0000 TXT, cache flush NSEC, ca 5353 5353 535								
10 1 1000 C 10 1 1 1 1 1 1 1 1 1 1 1 1 1								
Frame 27: 70 bytes on wire (560 bits), 70 bytes captured (560 bits) on interface en0, id 0								
Ethernet II. Src: Apple 42:f1:94 (3c:22:fb:42:f1:94), Dst: be:a5:8b:d0:e5:df (be:a5:8b:d0:e5:df)								
* Internet Protocol Version 4, Src: 192-168-43-29, Dst: 81.31.186.54								
0100 = Version: 4								
0101 = Header Length: 20 bytes (5)								
Differentiated Services Field: 0x00 (DSCP: CSO, ECN: Not-ECT) Total Length: 56 Total Length								
Identification: 0xc6c9 (50889)								
▶ Flags: 0x00								
Fragment Offset: 0								
Time to Live: 1								
Protocol: UDP 17								
Header Checksum: 0xfbd0 [validation disabled]								
[Header checksum status: Unverified]								
Source Address: 192.168.43.29								

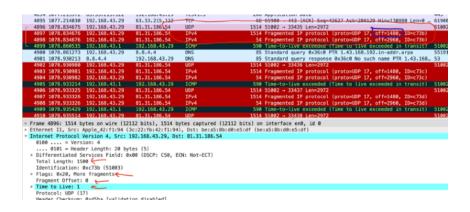
## 2- fragmentation

12] datagram length: 1500

13] "more fragments" flag

fragment offset being 0

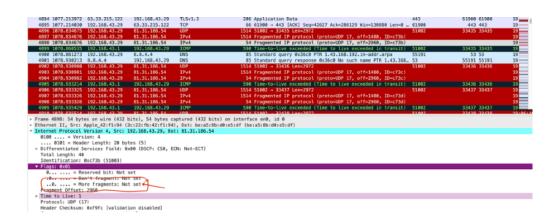
15] 1500 bytes



fragment offset = 1480 > 0
(which means the first byte of data is not the first byte of the assembled packet's payload)

17] fragment offset and header checksum

18] because of "more fragments" flag being equal to "not set".



3- IPv6

19]

src addr: 2601:193:8302:4620:215c:f5ae:8b40:a27a

dest addr: 2001:558:feed::1

20]

flow label: 0x00063ed0

21]

payload len: 37B

22]

user datagram protocol (UDP)

24]

one

25]

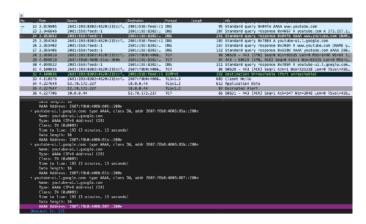
2607:f8b0:4006:815::200e

```
▼ Queries
▼ youtube.com: type AAAA, class IN
Name: youtube.com
  [Name Length: 11]
  [Label Count: 2]
  Type: AAAA (IPv6 Address) (28)
  Class: IN (0x0001)
▼ Answers
▼ youtube.com: type AAAA, class IN, addr 2607:f8b0:4006:815::200e
  Name: youtube.com
  Type: AAAA (IPv6 Address) (28)
  Class: IN (0x0001)
  Time to live: 201 (3 minutes, 21 seconds)
  Data length: 16
  AAAA Address: 2607:f8b0:4006:815::200e

[Request In: 20]

[Time: 0 140016000 seconds]
```

there are also other queries which they had received more answers. pictures of one is shown below:



## 4- ICMP, Ping

26]

source ip: 192.168.43.29 dest ip: 81.31.186.54

27]

since ICMP is a network layer protocol and unlike TCP and UDP it doesn't need ports to functions.

28]

request:

type: 8 code: 0

29]

reply:

type: 0 code: 0

not only the reply packet's ICMP header shares the same fields as the request but it also has the same field values (except for type). meaning that the only difference between ICMP header of a request message and its reply would be the "type" value (either 0 or 8) and checksum.

98 6.70 (plan) request id=bccfd2, seq=0/8, titl=64 (reply in 39) 18 2.70 (plan) request id=bccfd2, seq=0/8, titl=64 (reply in 39) 38 1.72853   31.72854   31.72853   31.72854   31.72853   31.72854   31.72853   31.72854   31.72853   31.72854   31.72853   31.72854   31.72853   31.72854   31.72853   31.72855   31.72853   31.72855								
20 8.785223 81.31.186.54 192.186.43.29 133.1186.54 10PP 98 Echo (ping) reply in debx(rd2, seq=4/6, ttl=51 (request in 19) 38 1.764289 81.31.186.54 10PP 98 Echo (ping) reply in debx(rd2, seq=4/56, ttl=51 (request in 19) 39 1.764289 81.31.186.54 10PP 98 Echo (ping) reply in debx(rd2, seq=4/256, ttl=51 (request in 19) 55 2.7272735 192.186.43.29 81.31.186.54 10PP 98 Echo (ping) reply in debx(rd2, seq=4/256, ttl=51 (request in 55) 57 3.22237 192.186.43.29 81.83.186.54 10PP 98 Echo (ping) reply in debx(rd2, seq=4/2512, ttl=51 (request in 55) 63 3.368112 6.8.68 192.186.43.29 10PP 98 Echo (ping) reply in debx(rd2, seq=4/2512, ttl=51 (request in 52) 63 3.368112 6.8.68 192.186.43.29 10PP 98 Echo (ping) reply in debx(rd2, seq=4/2512, ttl=61 (request in 52) 10PP 98 Echo (ping) reply in debx(rd2, seq=4/2512, ttl=61 (request in 52) 10PP 98 Echo (ping) reply in debx(rd2, seq=4/2512, ttl=61 (request in 52) 10PP 98 Echo (ping) reply in debx(rd2, seq=4/2512, ttl=61 (request in 52) 10PP 98 Echo (ping) request id=8xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	No.   Time	Source	Destination	Protocol Length	Info	l request	id=0vcfd2	seg-0/0 ttl-64 (reply in 20)
38 1.723653   30.1468-48.22   81.31.186.54   10P   98 Echo (ping) request   id=bxcfd2, seq=1256, ttl=64 (reply in 30)   30 1.754698   81.31.186.54   10P   98 Echo (ping) request   id=bxcfd2, seq=1256, ttl=64 (reply in 30)   55 2.727286   81.31.186.54   10P   98 Echo (ping) request   id=bxcfd2, seq=2/512, ttl=64 (reply in 50)   55 2.8072776   81.31.186.54   10P   98 Echo (ping) request   id=bxcfd2, seq=2/512, ttl=64 (reply in 50)   57 3.0272377   81.31.186.54   10P   98 Echo (ping) request   id=bxcfd2, seq=2/512, ttl=64 (reply in 50)   63 3.03812   63.6.86   43.29   102.168.43.29   10P   98 Echo (ping) request   id=bxcfd3, seq=60, ttl=64 (reply in 63)   63 3.03812   63.6.86   43.29   102.168.43.29   10P   98 Echo (ping) request   id=bxcfd3, seq=60, ttl=64 (reply in 63)   10P								
39 1.764209								
55 2.727736 192.168.43.29 \$1.31.186.54 ICMP 98 Echo (ping) request id=0xcfd2, seq=2/512, ttl=64 (reply in 56) 56 2.80716 81.731.186.54 192.168.43.29 8.8.8.8 ICMP 98 Echo (ping) request id=0xcfd2, seq=2/512, ttl=51 (request in 55 63 3.36812 8.8.8.8 192.168.43.29 1CMP 98 Echo (ping) request id=0xcfd2, seq=2/512, ttl=51 (request in 57 99 3.728941 192.168.43.29 81.31.186.54 ICMP 98 Echo (ping) request id=0xcfd2, seq=3/768, ttl=64 (reply in 63) 99 3.728941 192.168.43.29 81.31.186.54 ICMP 98 Echo (ping) request id=0xcfd2, seq=3/768, ttl=64 (reply in 180) 180 4.75000 41.31.186.54 ICMP 98 Echo (ping) request id=0xcfd2, seq=3/768, ttl=64 (reply in 180) 180 4.75000 41.31.186.54 ICMP 98 Echo (ping) request id=0xcfd2, seq=3/768, ttl=64 (reply in 180) 180 4.75000 41.31.186.54 ICMP 98 Echo (ping) request id=0xcfd2, seq=3/768, ttl=64 (reply in 180) 180 4.75000 41.31.186.54 ICMP 98 Echo (ping) request id=0xcfd2, seq=3/768, ttl=61 (request in 57) 180 4.7500 41.								
192.186.43.79 192.186.43.29 8.8.8.8 10P 99 Etcho (ping) repty id=0xfd2, seq=2/512, ttl=51 (request in 55 57 3.292637 192.186.43.29 8.8.8.8 10P 99 Etcho (ping) request id=0xfd2, seq=2/512, ttl=54 (repty in 63) 63 3.368112 8.8.8.8 192.166.43.29 1CMP 99 Etcho (ping) repty id=0x7366, seq=0/0, ttl=60 (repty in 63) 99 3.728041 192.168.43.29 81.31.186.54 1CMP 99 Etcho (ping) request id=0x7366, seq=0/0, ttl=60 (repty in 180) 99 3.728041 192.168.43.29 10.168.43.29 1CMP 99 Etcho (ping) request id=0x7366, seq=0/0, ttl=61 (repty in 180) 99 3.728041 192.168.43.29 90 131.186.54 1CMP 99 Etcho (ping) request id=0xfd2 seq=3/368 ttl=61 (repty in 180) 99 3.728041 192.168.43.29 90 131.186.54 10.168.43.29 1CMP 99 Etcho (ping) request id=0xfd2 seq=3/368 ttl=51 (request in 50 seq=0x in 180 seq=0x i								
57 3.292637 192.168.43.29 8.8.8 IOPP 98 Echo (ping) request id=0x7665, seq=0/0, ttt=04 (reply in 63) 63 3.586112 8.8.8.8 192.168.43.29 B1.31.186.54 IOPP 98 Echo (ping) request id=0x7665, seq=0/0, ttt=04 (reply in 180) 180 2.75607 91 31 186.64 102 168.43.29 IOPP 98 Echo (ping) request id=0x6762, seq=3/768, ttl=64 (reply in 180) 180 2.75607 91 31 186.64 102 168.43.29 IOPP 98 Echo (ping) request id=0x6762, seq=3/768, ttl=64 (reply in 180) 180 2.75607 91 31 186.64 102 168.43.29 IOPP 98 Echo (ping) request id=0x6762, seq=3/768, ttl=51 (request in 0.00 Prime to Control Nessage Protocol (version Number (RE) : 2 (8x8802) 100 180 180 180 180 180 180 180 180 180								
6 3 3.368112 8.8.8.8 192.168.43.29 ICMP 98 Echo (ping) reply id=0x7665, seq=0/6, ttl=100 (request in 57) 99 3.728041 192.168.43.20 103.168.43 20 ICMP 98 Echo (ping) request id=0xxfd2, seq=3/758, ttl=64 (reply in 90) 102.168.43.20 ICMP 98 Echo (ping) request id=0xxfd2 cen=3/758 ttl=51 (request in 57) 102.758.2007 103.186.44 103.168.43 20 ICMP 98 Echo (ping) request id=0xxfd2 cen=3/758 ttl=51 (request in 90) 102.758.2007 103.186.43 103.186.54 103.18								
99 3.728941 192.168.43.29 81.31.186.54 IOMP 98 Echo (ping) request id=8xcfd2, seq=2/768 ttl=64 (reply in 180)								
### 102 3 755007 81 31 186.54 102 166 43 20 TCM9 08 Echo (nino) coniv id=Nordf2 rea=2/750 ttl=51 (request in 00 Frame 55: 88 bytes on wire (784 bits), 98 bytes captured (784 bits) on interface en0, id 0 ### 175: Apple_42:f1:94 (sc:22:fb:42:f1:94), Dst: be:asi8b:dd:e5:df (be:a5:8b:dd:e5:df) ### 175: Apple_42:f1:94 (sc:22:fb:42:f1:94), Dst: be:asi8b:dd:e5:df (be:a5:8b:dd:e5:df) ### 175: Apple_42:f1:94 (sc:22:fb:42:f1:94), Dst: be:asi8b:dd:e5:df (be:a5:8b:dd:e5:df) ### 175: Apple_42:f1:94 (sc:22:fb:42:f1:94) ### 175: Apple_42:f1:94 (be:a5:8b:dd:e5:df) ### 175: Apple_42:f1:94 (be:a5:a5:a5:a5:a5:a5:a5:a5:a5:a5:a5:a5:a5:								
Ethernet II, Src: Apple_42:fi1:94 (3c:72:fb:42:f1:94), Dst: be:a3:8b:d8:e5:df (be:a5:8b:d8:e5:df)  Internet Protocol Version 4, Src: 192.168.43.29, Dst: 81.31.186.54  **Internet Control Message Protocol  **Type: 8 (Echo (ping) request)  **Code: 0  **Checksum Status: Good]  Identifier (BE): 53202 (0xcfd2)  **Internet Control Message Protocol  **Sequence Number (LE): 512 (0xc002)  **Trans 56: 98 bytes on wire (784 bits), 98 bytes captured (784 bits) on interface end, ind  **Frame 56: 98 bytes on wire (784 bits), 98 bytes captured (784 bits) on interface end, ind  **Trans 56: 98 bytes on wire (784 bits), 98 bytes captured (784 bits) on interface end, ind  **Trans 56: 98 bytes on wire (784 bits), 98 bytes captured (784 bits) on interface end, ind  **Trans 56: 98 bytes on wire (784 bits), 98 bytes captured (784 bits) on interface end, ind  **Trans 56: 98 bytes on wire (784 bits), 98 bytes captured (784 bits) on interface end, ind  **Trans 56: 98 bytes on wire (784 bits), 98 bytes captured (784 bits) on interface end, ind  **Trans 56: 98 bytes on wire (784 bits), 98 bytes captured (784 bits) on interface end, ind  **Trans 56: 98 bytes on wire (784 bits), 98 bytes captured (784 bits) on interface end, ind  **Trans 56: 98 bytes on wire								
## 55 2.727736 192,168.43.29 81.31.186.54 ICMP 98 Echo (ping) request id=0xcfd2, seq=2/512, ttl=64 (reply in 56)  ## 55 2.887176 81.31.186.54 192.168.43.29 ICMP 98 Echo (ping) reply id=0xcfd2, seq=2/512, ttl=51 (request in 55)  ## 57 3.292637 192.168.43.29 8.8.8.8 ICMP 98 Echo (ping) reply id=0x7a66, seq=0/0, ttl=64 (reply in 63)  ## 63 3.368112 8.8.8.8 192.168.43.29 ICMP 98 Echo (ping) reply id=0x7a66, seq=0/0, ttl=109 (request in 57)  ## 99 3.728941 192.168.43.29 81.31.186.54 ICMP 98 Echo (ping) reply id=0x7a66, seq=0/0, ttl=109 (request in 57)  ## 8 Echo (ping) reply id=0x7a66, seq=0/0, ttl=109 (request in 57)  ## 8 Echo (ping) reply id=0x7a66, seq=0/0, ttl=109 (request in 57)  ## 8 Echo (ping) reply id=0x7a66, seq=0/0, ttl=109 (request in 57)  ## 8 Echo (ping) reply id=0x7a66, seq=0/0, ttl=109 (request in 57)  ## 8 Echo (ping) reply id=0x7a66, seq=0/0, ttl=109 (request in 57)  ## 8 Echo (ping) reply id=0x7a66, seq=0/0, ttl=109 (request in 57)  ## 8 Echo (ping) reply id=0x7a66, seq=0/0, ttl=109 (request in 57)  ## 8 Echo (ping) reply id=0x7a66, seq=0/0, ttl=109 (request in 57)  ## 8 Echo (ping) reply id=0x7a66, seq=0/0, ttl=109 (request in 57)  ## 8 Echo (ping) reply id=0x7a66, seq=0/0, ttl=109 (request in 57)  ## 8 Echo (ping) reply id=0x7a66, seq=0/0, ttl=64 (reply in 100)  ## Echo (ping) reply id=0x7a66, seq=0/0, ttl=64 (reply in 109)  ## Echo (ping) reply id=0x7a66, seq=0/0, ttl=64 (reply in 57)  ## 10	Type: 8 (Echo (; Code: 0 Checksum: 0x0fcc (Checksum: 0x0fcc (Checksum Status J Identifier (BE): Sequence Number Sequence Number [Response frame: Timestamp from: [Timestamp from	ping) request)  [ [correct]  5: Good]  : 53982 (0xcfd2)  : 53967 (0xd2cf)  (BE): 2 (0x0002)  (LE): 512 (0x0200)  : 56]  Lomp data: May 24, 2021 01:2		430				
56 2.807176 81.31.186.54 192.168.43.29 ICMP 98 Echo (ping) reply id=0xcfd2, seq=2/512, ttl=51 (request in 55) 57 3.292637 192.168.43.29 8.8.8.8 ICMP 98 Echo (ping) request id=0x7a66, seq=0/0, ttl=64 (reply in 63) 63 3.368112 8.8.8.8 192.168.43.29 ICMP 98 Echo (ping) reply id=0x7a66, seq=0/0, ttl=109 (request in 57) 99 3.728941 192.168.43.29 81.31.186.54 ICMP 98 Echo (ping) request id=0xcfd2, seq=3/768, ttl=64 (reply in 100) 100 2.755007 91 31.186.54 ICMP 98 Echo (ping) request id=0xcfd2, seq=3/768, ttl=64 (reply in 100) 100 2.755007 91 31.186.54 ICMP 98 Echo (ping) request id=0xcfd2, seq=3/768, ttl=64 (reply in 100) 100 2.755007 91 31.186.54 ICMP 98 Echo (ping) reply id=0xcfd2, seq=3/768, ttl=64 (reply in 100) 100 2.755007 91 31.186.54 ICMP 98 Echo (ping) reply id=0xcfd2, seq=3/768, ttl=64 (reply in 100) 100 2.755007 91 31.186.54 ICMP 98 Echo (ping) reply id=0xcfd2, seq=3/768, ttl=64 (reply in 100) 100 2.755007 91 31.186.54 ICMP 98 Echo (ping) reply id=0xcfd2, seq=3/768, ttl=64 (reply in 100) 100 2.755007 91 31.186.54 ICMP 98 Echo (ping) reply id=0xcfd2, seq=3/768, ttl=64 (reply in 100) 100 2.755007 91 31.186.54 ICMP 98 Echo (ping) reply id=0xcfd2, seq=3/768, ttl=64 (reply in 100) 100 2.755007 91 31.186.54 ICMP 98 Echo (ping) reply id=0xcfd2, seq=3/768, ttl=64 (reply in 100) 100 2.755007 91 31.186.54 ICMP 98 Echo (ping) reply id=0xcfd2, seq=3/768, ttl=64 (reply in 100) 100 2.755007 91 31.186.54 ICMP 98 Echo (ping) reply id=0xcfd2, seq=3/768, ttl=64 (reply in 100) 100 2.755007 91 31.186.54 ICMP 98 Echo (ping) reply id=0xcfd2, seq=3/768, ttl=64 (reply in 100) 100 2.755007 91 31.186.54 ICMP 98 Echo (ping) reply id=0xcfd2, seq=3/768, ttl=64 (reply in 55) ICMP 98 Echo (ping) reply id=0xcfd2, seq=3/768, ttl=64 (reply in 50) 100 2.755007 91 31.186.54 ICMP 98 Echo (ping) reply id=0xcfd2, seq=3/768, ttl=64 (reply in 50) 100 2.755007 91 31.186.54 ICMP 98 Echo (ping) reply id=0xcfd2, seq=3/768, ttl=64 (reply in 50) 100 2.755007 91 31.186.54 ICMP 98 Echo (ping) reply id=0xcfd2, seq=3/768, ttl=64 (reply in 50) 100 2.755007		100 100 100 00	01 01 100 51	TOWN	00 5-1 /		11 0512	
57 3.292637 192.168.43.29 8.8.8.8 ICMP 98 Echo (ping) request id=0x7a66, seq=0/0, ttl=64 (reply in 63) 63 3.368112 8.8.8.8 192.168.43.29 ICMP 98 Echo (ping) reply id=0x7a66, seq=0/0, ttl=109 (request in 57) 99 3.728941 192.168.43.29 81.31.186.54 ICMP 98 Echo (ping) request id=0x7a66, seq=3/768, ttl=64 (reply in 100) 140 3.755007 81 31 186 54 100 168 43.20 ICMP 98 Echo (ping) request id=0x7d6, seq=3/768, ttl=64 (reply in 100) 140 3.755007 81 31 186 54 100 168 43.20 ICMP 98 Echo (ping) request id=0x7d6, seq=3/768, ttl=64 (reply in 100) 140 3.755007 81 31 186 54 100 168 43.20 ICMP 98 Echo (ping) reply id=0x7d6, seq=3/768, ttl=51 (request in 00) 140 3.755007 81 31 186 54 100 168 43.20 ICMP 98 Echo (ping) reply id=0x7d6 (reply in 100) 140 3.755007 81 31 186 54 100 168 43.20 ICMP 98 Echo (ping) reply 140 30 168 43.29 ICMP 98 Echo (ping) reply 140 30 168 43.29 ICMP 98 Echo (ping) reply 140 30 168 43.29 ICMP 98 Echo (ping) reply 140 30 168 43.29 ICMP 98 Echo (ping) reply 140 30 168 43.29 ICMP 98 Echo (ping) reply 140 30 168 43.29 ICMP 98 Echo (ping) reply 140 30 168 43.29 ICMP 98 Echo (ping) reply 140 30 168 43.29 ICMP 98 Echo (ping) reply 140 30 168 43.29 ICMP 98 Echo (ping) reply 140 30 168 43.29 ICMP 98 Echo (ping) reply 140 30 168 43.29 ICMP 98 Echo (ping) reply 140 30 168 43.29 ICMP 98 Echo (ping) reply 140 30 168 43.29 ICMP 98 Echo (ping) reply 140 30 168 43.29 ICMP 98 Echo (ping) reply 140 30 168 43.29 ICMP 98 Echo (ping) reply 140 30 168 43.29 ICMP 98 Echo (ping) reply 140 30 168 43.29 ICMP 98 Echo (ping) reply 140 30 168 43.29 ICMP 98 Echo (ping) reply 140 30 168 43.20 ICMP 98 Echo (ping) reply 140 30 168 43.20 ICMP 98 Echo (ping) reply 140 30 168 43.20 ICMP 98 Echo (ping) reply 140 30 168 43.20 ICMP 98 Echo (ping) reply 140 30 168 43.20 ICMP 98 Echo (ping) reply 140 30 168 43.20 ICMP 98 Echo (ping) reply 140 30 168 43.20 ICMP 98 Echo (ping) reply 140 30 168 43.20 ICMP 98 Echo (ping) reply 140 30 168 43.20 ICMP 98 Echo (ping) reply 140 30 168 43.20 ICMP 98 Echo (ping) reply 140 30 168 43.20 ICMP 98 Echo (ping								
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99 3.728941 192.168.43.29 81.31.186.54 ICMP 98 Echo (ping) request id=0xcfd2, seq=3/768, ttl=64 (reply in 100) 102 160 23 765807 91 31 186 54 102 160 23 20 1700 98 Echo (ping) request id=0xcfd2, seq=3/768, ttl=64 (reply in 100) 102 160 23 765807 91 31 186 54 102 160 23 20 1700 98 Echo (ping) reply id=0xcfd2 seq=3/768, ttl=64 (reply in 100) 102 160 23 765807 91 31 186 54 102 160 23 20 1700 98 Echo (ping) reply id=0xcfd2 seq=3/768, ttl=64 (reply in 100) 102 160 23 20 1700 98 Echo (ping) reply id=0xcfd2 seq=3/768, ttl=64 (reply in 100) 102 160 23 20 1700 98 Echo (ping) reply id=0xcfd2 seq=3/768, ttl=64 (reply in 100) 102 160 23 20 160 20 20 20 20 20 20 20 20 20 20 20 20 20								
188 3 755007   81 31 186 54   102 168 43 20   TOMD   08 Echo (nion) renly   id=0vcfd2   cen=2/768   t+1=51 (request in 00)								
Frame 56: 98 bytes on wire (784 bits), 98 bytes captured (784 bits) on interface en0, id 0  ► Ethernet II, Src: bera5:8b:d0:e5:df (bera5:8b:d0:e5:df), bst: Apple_42:f1:94 (3c:22:fb:42:f1:94)  ► Internet Protocol Version 4, Src: 81.31.186.54, Dst: 192.168.43.29  ▼ Internet Control Message Protocol  ▼ Type: 0 (Echo (ping) reply)  ► Code: 0  Checksum: 0x17cc [correct] [Checksum Status: Good]  Identifier (BE): 53202 (0xcfd2)  Identifier (LE): 53967 (0xd2cf)  Sequence Number (BE): 2 (0x0002)  Sequence Number (BE): 512 (0x0002)  Sequence Number (IE): 512 (0x0200)  [Request frame: 55] [Response time: 79.440 ms]								
[Timestamp from icmp data (relative): 0.079521000 seconds] → Data (48 bytes)	> Ethernet II, Src: Internet Protocol Internet Control W Type: 0 (Echo (p Code: 0 Checksum: 0x17cc [Checksum Status Identifier (EE): Sequence Number Sequence Number [Request frame: [Response time:	be:a5:8b:d0:e5:df (be:a5:8b Version 4, Src: 81.31.186.5 versage Protocol ping) reply) : [correct] :: Good] : 53902 (0xcfd2) : 53967 (0xd2cf) (BE): 2 (0x0002) (LE): 512 (0x0200) 55] 79.440 ms]	:d0:e5:df), Dst:	Apple_42:f1:94 (3c:22:fb:				