Ονοματεπώνυμο:

AM:

Απαντήσεις

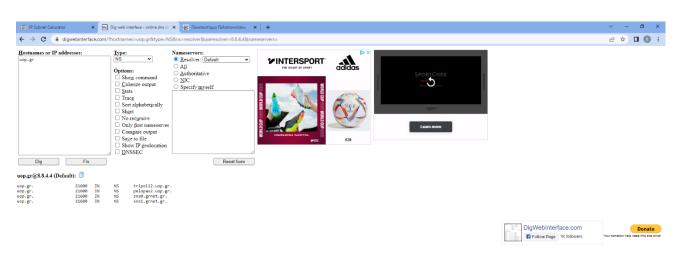
Α

B Server DHCP, Server DNS, Lease obtained, lease expired

C με 192.168.1.10/24 και με το tool https://www.calculator.net/ip-subnet-calculator.html?cclass=any&csubnet=24&cip=192.168.1.10&ctype=ipv4&printit=0&x=54&y=17 192.168.1.254

 $D(2^{(32-24)}) - 2 = 254$

E uop.gr. 21600 IN NS





pelopas2.uop.gr.

sns0.grnet.gr.

sns1.grnet.gr.

F είναι όλα τα layers

G τους mail servers του domain name uop.gr. pelopas2.uop.gr.

21600 IN MX

10

H 192.0.43.8

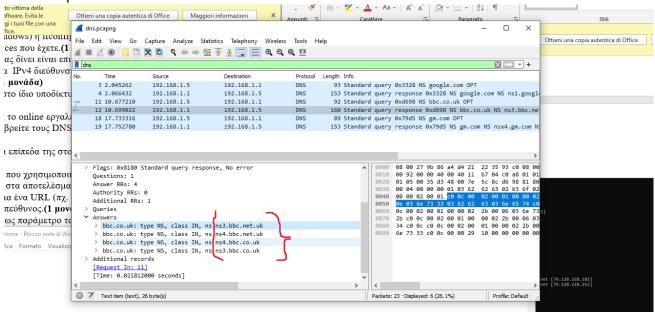
Ι Στο 5ο

```
79.128.228.252
                          4 ms
33 ms
           4 ms
32 ms
                                           3 ms
                                                     62.75.3.73
62.75.14.138
  8
                                         33 ms
           30 ms
                          31 ms
                                        105 ms
                                                     217.161.88.205
                                                    ae3-pcr1.fis.cw.net [195.2.27.225]
ae13.cr7-fra2.ip4.gtt.net [154.14.34.89]
ae16.cr4-was1.ip4.gtt.net [89.149.139.133]
ip4.gtt.net [69.174.10.82]
43-8.any.icann.org [192.0.43.8]
                                         31 ms
37 ms
 10
           32 ms
                          30 ms
11
12
13
14
           35 ms
                          31 ms
                                       122 ms
117 ms
         118 ms
                        120 ms
                        119 ms
         120 ms
         117
                        120 ms
                                       120 ms
Traccia completata.
C:\Users\CelaniDe>tracert -4 google.com
Traccia instradamento verso google.com [142.250.181.238]
su un massimo di 30 punti di passaggio:
                                         <1 ms
3 ms
2 ms
           <1 ms
                          <1 ms
2 ms
2 ms
                                                     speedport.ip [192.168.1.1]
10.106.108.100
 2
4
5
6
7
8
9
            1 ms
2 ms
                                                     ampe-asr99b-xari-asr9kb.backbone.otenet.net [79.128.228.181]
ampe-asr99b-poly-asr9ka.backbone.otenet.net [79.128.228.253]
                                           2 ms
             1 ms
                            2 ms
                                           4 ms
                                                     79.128.36.212
                                                    79.128.228.252
62.75.3.73
62.75.14.142
                            4 ms
                                           4 ms
             3 ms
                            5 ms
                                           5 ms
           31 ms
                          32 ms
                                         31 ms
                                                     74.125.51.154
           33 ms
                          34 ms
                                         31 ms
           33 ms
                          31 ms
                                         34 ms
```

A 0x83a2

B 0.021812000





D src socket = (192.168.1.5:49758) dst socket = (209.51.188.148:80)

E 15 segments

F 20172

G sequence number = 19517 and length = 656 bytes.

H 0x0800

I later

J total length = 72 bytes

K dest mac = (00:19:b9:f1:bc:31) and src mac = (00:16:e6:df:1f:73)

L όχι επειδή δεν έχουμε την subnet mask

M oxi (later)

N www.nasa.gov (later)

Α

1 χωράει $2^{(32-21)} - 2 = 2046$

2 Later

Δίκτυο	Απαίτηση	Χωρητικότητα	Διεύθυνση Δικτύου	Εύρος έγκυρων διευθύνσεων	Prefix
	σε hosts	Υποδικτύου		IPv4 (για hosts) από - έως	
		σε (hosts)			
Δ1	525	1022	192.168.128.0	192.168.128.1 - 192.168.131.254	22
Δ2	450	510	192.168.132.0	192.168.132.1 - 192.168.133.254	23
Δ3	320				
Δ4	100				
Δ5	63				
Δ6	50				
Δ7	32				
Δ8	10				
Δ9	7				
Δ10	4		_		

Για μάσκα 20 επειδή με 21 δεν λειτουργεί σωστά

Δίκτυο	Απαίτηση σε hosts	Χωρητικότητα Υποδικτύου	Διεύθυνση Δικτύου	Εύρος έγκυρων διευθύνσεων IPv4 (για hosts) από - έως	Prefix
	505	σε (hosts)	192.168.128.0	192.168.128.1 - 192.168.131.254	22
Δ1	525	1022	192.100.120.0	192.100.120.1 - 192.100.131.234	22
Δ2	450	510	192.168.132.0	192.168.132.1 - 192.168.133.254	23
Δ3	320	510	192.168.134.0	192.168.134.1 - 192.168.135.254	23
Δ4	100	126	192.168.136.0	192.168.136.1 - 192.168.136.126	25
Δ5	63	126	192.168.136.128	192.168.136.129 - 192.168.136.254	25
Δ6	50	62	192.168.137.0	192.168.137.1 - 192.168.137.62	26
Δ7	32	62	192.168.137.64	192.168.137.65 - 192.168.137.126	26
Δ8	10	14	192.168.137.128	192.168.137.129 - 192.168.137.142	28
Δ9	7	14	192.168.137.144	192.168.137.145 - 192.168.137.158	28

Δ10	4	6	192.168.137.160	192.168.137.161 - 192.168.137.166	29

3

B 192.168.137.168 - 192.168.143.255

R2

Туре	Network	Prefix	Next hop
S	192.168.20.0	/24	10.10.20.1
S	10.10.10.0	/24	10.10.20.1
S	192.168.10.0	/24	10.10.20.1

R1

Type	Network	Prefix	Next hop
S	192.168.30.0	/24	10.10.20.2
S	192.168.10.0	/24	10.10.10.2

R3

Type	Network	Prefix	Next hop
S	192.168.20.0	/24	10.10.10.1
S	10.10.20.0	/24	10.10.10.1
S	192.168.30.0	/24	10.10.10.1

С

1 vaı, η network address is 192.168.120.0

2 boradcast address = 192.168.127.255

3 192.168.120.1 - 192.168.127.254

4 2^(32-21) = 2046