CprE 489, Section 4
Lab Experiment #1: Networking Utility Programs

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Exercises:

1) For iastate.edu : .788 ms
   For www.cam.ac.uk: 113.736
   For lenovo.com.cn: 35.606

```
--- www.iastate.edu ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3003ms
rtt min/avg/max/mdev = 0.599/0.788/0.938/0.144 ms
[489labuser@co2061-14 ~]$ ping -c 4 www.cam.ac.uk
PING www.cam.ac.uk (128.232.132.8) 56(84) bytes of data.
64 bytes from tm-128-232-132-8.tm.uis.cam.ac.uk (128.232.132.8): icmp_seq=1 ttl=44 time=113 ms
64 bytes from tm-128-232-132-8.tm.uis.cam.ac.uk (128.232.132.8): icmp_seq=2 ttl=44 time=113 ms
64 bytes from tm-128-232-132-8.tm.uis.cam.ac.uk (128.232.132.8): icmp_seq=3 ttl=44 time=113 ms
64 bytes from tm-128-232-132-8.tm.uis.cam.ac.uk (128.232.132.8): icmp_seq=4 ttl=44 time=113 ms

--- www.cam.ac.uk ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3005ms
rtt min/avg/max/mdev = 113.611/113.736/113.872/0.093 ms
[489labuser@co2061-14 ~]$ ping -c 4 www.lenovo.com.cn
PING www.lenovo.com.cn.lxdns.com (220.242.158.13) 56(84) bytes of data.
64 bytes from 220.242.158.13 (220.242.158.13): icmp_seq=1 ttl=51 time=35.6 ms
64 bytes from 220.242.158.13 (220.242.158.13): icmp_seq=2 ttl=51 time=35.3 ms
64 bytes from 220.242.158.13 (220.242.158.13): icmp_seq=3 ttl=51 time=34.9 ms
64 bytes from 220.242.158.13 (220.242.158.13): icmp_seq=4 ttl=51 time=35.6 ms

--- www.lenovo.com.cn.lxdns.com ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3003ms
rtt min/avg/max/mdev = 34.941/35.412/35.695/0.373 ms
[489labuser@co2061-14 ~]$ ping -c 4 www.lenovo.com.cn
PING www.lenovo.com.cn.lxdns.com (220.242.158.13) 56(84) bytes of data.
64 bytes from 220.242.158.13 (220.242.158.13): icmp_seq=1 ttl=51 time=35.6 ms
64 bytes from 220.242.158.13 (220.242.158.13): icmp_seq=2 ttl=51 time=35.6 ms
64 bytes from 220.242.158.13 (220.242.158.13): icmp_seq=3 ttl=51 time=35.7 ms
64 bytes from 220.242.158.13 (220.242.158.13): icmp_seq=4 ttl=51 time=35.4 ms
```

2) Since the IP is a loopback address, pinging 127.0.0.1 causes a machine to essentially ping itself, hence the very low latency.

```
[489labuser@co2061-15 ~]$ ping 127.0.0.1
PING 127.0.0.1 (127.0.0.1) 56(84) bytes of data.
64 bytes from 127.0.0.1: icmp_seq=1 ttl=64 time=0.087 ms
64 bytes from 127.0.0.1: icmp_seq=2 ttl=64 time=0.060 ms
64 bytes from 127.0.0.1: icmp_seq=3 ttl=64 time=0.064 ms
64 bytes from 127.0.0.1: icmp_seq=4 ttl=64 time=0.063 ms
64 bytes from 127.0.0.1: icmp_seq=5 ttl=64 time=0.065 ms
64 bytes from 127.0.0.1: icmp_seq=6 ttl=64 time=0.014 ms
64 bytes from 127.0.0.1: icmp_seq=7 ttl=64 time=0.063 ms
64 bytes from 127.0.0.1: icmp_seq=8 ttl=64 time=0.063 ms
64 bytes from 127.0.0.1: icmp_seq=9 ttl=64 time=0.047 ms
64 bytes from 127.0.0.1: icmp_seq=10 ttl=64 time=0.033 ms
^C
--- 127.0.0.1 ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 8999ms
rtt min/avg/max/mdev = 0.014/0.055/0.087/0.021 ms
```

3) Facebook: 31.13.93.35 - star-mini.c10r.facebook.com
   Microsoft: 23.35.205.40 - www.microsoft.com-c-3.edgekey.net.globalredir.akadns.net
   Wikipedia: 208.80.153.232 - ncredir-lb.wikimedia.org

```
Non-authoritative answer:
www.facebook.com        canonical name = star-mini.c10r.facebook.com.
Name:   star-mini.c10r.facebook.com
Address: 31.13.93.35
```

```
Non-authoritative answer:
www.microsoft.com       canonical name = www.microsoft.com-c-3.edgekey.net.
www.microsoft.com-c-3.edgekey.net       canonical name = www.microsoft.com-c-3.edgekey.net.globalredir.akadns.net
www.microsoft.com-c-3.edgekey.net.globalredir.akadns.net        canonical name = e13678.dspb.akamaiedge.net.
Name:   e13678.dspb.akamaiedge.net
Address: 23.35.205.40
```

```
Non-authoritative answer:
www.wikipedia.com       canonical name = ncredir-lb.wikimedia.org.
Name:   ncredir-lb.wikimedia.org
Address: 208.80.153.232
```

4) 10 vulcan.ece.iastate.edu

```
[489labuser@co2061-14 ~]$ nslookup
> set type=MX
> ece.iastate.edu
;; Got recursion not available from 192.168.254.254, trying next server
Server:         129.186.140.200
Address:        129.186.140.200#53

ece.iastate.edu mail exchanger = 10 vulcan.ece.iastate.edu.
```

5) spock.ee.iastate.edu

```
[489labuser@co2061-14 ~]$ nslookup
> set type=CNAME
> 129.186.215.40
;; Got recursion not available from 192.168.254.254, trying next server
Server:         129.186.140.200
Address:        129.186.140.200#53

Non-authoritative answer:
40.215.186.129.in-addr.arpa     name = spock.ee.iastate.edu.

Authoritative answers can be found from:
>
```

6) 192.168.254.15 (Lab computer 15)

```
[489labuser@co2061-15 ~]$ ifconfig enp0s31f6
enp0s31f6: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.254.15  netmask 255.255.255.0  broadcast 192.168.254.255
        ether 50:9a:4c:47:62:cd  txqueuelen 1000  (Ethernet)
        RX packets 1279447  bytes 1169164627 (1.0 GiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 989027  bytes 929106378 (886.0 MiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
        device interrupt 16  memory 0xef200000-ef220000
```

7) The connection is most likely 1 Gbps. The bandwidth is indicated to be 600 Mbits/second, which is larger than all given options other than 1 Gbps.

```
[489labuser@co2061-14 ~]$ iperf -c 192.168.254.2
------------------------------------------------------------
Client connecting to 192.168.254.2, TCP port 5001
TCP window size:  493 KByte (default)
------------------------------------------------------------
[  3] local 192.168.254.14 port 45908 connected with 192.168.254.2 port 5001
[ ID] Interval       Transfer     Bandwidth
[  3]  0.0-10.0 sec   716 MBytes   600 Mbits/sec
[489labuser@co2061-14 ~]$
```

8) The trace takes 30 hops to reach its destination in Pennsylvania. The connection is not accepted at the 17th hop due to security at CMU.

```
[489labuser@co2061-14 ~]$ traceroute www.cmu.edu
traceroute to www.cmu.edu (128.2.42.52), 30 hops max, 60 byte packets
 1  gateway (192.168.254.254)  0.271 ms  0.116 ms  0.078 ms
 2  routera-129-186-5-0.tele.iastate.edu (129.186.5.252)  0.671 ms  0.801 ms  0.871 ms
 3  rtr-e63be-vlan254.tele.iastate.edu (129.186.254.160)  0.670 ms  0.744 ms rtr-b31be-vlan254.tele.iast
 4  rtr-b31nat1-vlan920.tele.iastate.edu (192.188.159.132)  0.388 ms  0.453 ms  0.442 ms
 5  rtr-b31be1-vlan930.tele.iastate.edu (192.188.159.169)  0.840 ms  1.098 ms  1.216 ms
 6  rtr-b31isp1-be152.tele.iastate.edu (192.188.159.153)  1.155 ms  1.062 ms  1.102 ms
 7  et-8-3-0.1420.rtsw.kans.net.internet2.edu (163.253.5.19)  5.210 ms  5.169 ms  5.123 ms
 8  ae-3.4079.rtsw.chic.net.internet2.edu (162.252.70.140)  16.770 ms  16.865 ms  16.852 ms
 9  ae-6.4079.rtsw2.ashb.net.internet2.edu (162.252.70.60)  33.702 ms  33.669 ms  33.639 ms
10  ae-2.4079.rtsw.wash.net.internet2.edu (162.252.70.136)  33.563 ms  33.715 ms  33.460 ms
11  et-9-1-0.4079.rtsw.phil.net.internet2.edu (162.252.70.118)  37.989 ms  37.958 ms  36.408 ms
12  204.238.76.33 (204.238.76.33)  36.786 ms  36.814 ms  36.845 ms
13  204.238.76.46 (204.238.76.46)  36.986 ms  37.087 ms  36.927 ms
14  162.223.17.79 (162.223.17.79)  183.336 ms  165.483 ms  165.405 ms
15  CORE0-POD-I-DCNS.GW.CMU.NET (128.2.0.193)  44.809 ms  44.830 ms  44.790 ms
16  POD-D-CYH-CORE0.GW.CMU.NET (128.2.0.202)  44.384 ms  44.308 ms  44.253 ms
17  WWW-CMU-PROD-VIP.ANDREW.CMU.EDU (128.2.42.52)  44.220 ms  44.245 ms  44.243 ms
```

9) Traceroute and TCPTraceroute use different protocols to send data.
Using tcptraceroute takes longer than using traceroute because TCP packets require a connection and go through error checking. This minimizes data loss at the cost of speed.

```
[489labuser@co2061-15 ~]$ sudo tcptraceroute -n  www.ed.ac.uk
[sudo] password for 489labuser:
traceroute to www.ed.ac.uk (129.215.228.101), 30 hops max, 60 byte packets
 1  192.168.254.254  0.239 ms  0.175 ms  0.148 ms
 2  129.186.5.252  0.757 ms  0.821 ms  1.080 ms
 3  129.186.254.131  0.800 ms  0.613 ms 129.186.254.160  0.583 ms
 4  192.188.159.132  0.406 ms  0.448 ms  0.400 ms
 5  192.188.159.170  0.911 ms  1.368 ms  1.202 ms
 6  192.188.159.159  1.346 ms  1.172 ms  1.051 ms
 7  163.253.5.19  5.311 ms  5.277 ms  5.225 ms
 8  162.252.70.140  16.718 ms  16.574 ms  16.728 ms
 9  162.252.70.60  33.132 ms  33.085 ms  33.097 ms
10  162.252.70.136  33.026 ms  33.164 ms  33.080 ms
11  62.40.124.44  115.852 ms  115.761 ms  115.675 ms
12  62.40.124.198  108.178 ms  108.076 ms  107.969 ms
13  146.97.33.2  108.732 ms  108.488 ms  108.638 ms
14  146.97.33.22  121.838 ms  121.547 ms  112.196 ms
15  146.97.33.42  114.498 ms  114.369 ms  114.287 ms
16  * 146.97.33.54  118.591 ms  118.558 ms
17  146.97.38.38  119.732 ms  119.672 ms *
18  146.97.74.34  120.483 ms  120.289 ms *
19  146.97.156.78  120.399 ms  120.411 ms  120.297 ms
20  194.81.57.209  120.724 ms  120.674 ms *
21  129.215.228.101 <syn,ack>  120.454 ms  120.546 ms  120.427 ms
```

10) Port 22 is open on spock.ee.iastate.edu.

```
[489labuser@co2061-15 ~]$ nmap -PN spock.ee.iastate.edu

Starting Nmap 6.40 ( http://nmap.org ) at 2020-01-24 14:00 CST
Nmap scan report for spock.ee.iastate.edu (129.186.215.40)
Host is up (0.00045s latency).
Not shown: 992 closed ports
PORT    STATE SERVICE
21/tcp  open  ftp
22/tcp  open  ssh
23/tcp  open  telnet
25/tcp  open  smtp
80/tcp  open  http
110/tcp open  pop3
143/tcp open  imap
587/tcp open  submission

Nmap done: 1 IP address (1 host up) scanned in 5.96 seconds
```

11) 192.168.254.1

```
[489labuser@co2061-14 ~]$ sudo tcpdump 'icmp[0]'=8 and icmp[0] != 0
tcpdump: verbose output suppressed, use -v or -vv for full protocol decode
listening on enp0s31f6, link-type EN10MB (Ethernet), capture size 262144 bytes
14:15:21.205438 IP 192.168.254.1 > 192.168.254.0: ICMP echo request, id 20807, seq 190, length 64
14:15:31.796355 IP 192.168.254.1 > 192.168.254.255: ICMP echo request, id 26632, seq 17436, length 64
14:15:41.225880 IP 192.168.254.1 > 192.168.254.0: ICMP echo request, id 20807, seq 191, length 64
14:15:46.811794 IP 192.168.254.1 > 192.168.254.255: ICMP echo request, id 26632, seq 17437, length 64
14:16:01.246438 IP 192.168.254.1 > 192.168.254.0: ICMP echo request, id 20807, seq 192, length 64
14:16:01.827286 IP 192.168.254.1 > 192.168.254.255: ICMP echo request, id 26632, seq 17438, length 64
14:16:16.842715 IP 192.168.254.1 > 192.168.254.255: ICMP echo request, id 26632, seq 17439, length 64
14:16:21.266894 IP 192.168.254.1 > 192.168.254.0: ICMP echo request, id 20807, seq 193, length 64
14:16:31.858173 IP 192.168.254.1 > 192.168.254.255: ICMP echo request, id 26632, seq 17440, length 64
14:16:41.287251 IP 192.168.254.1 > 192.168.254.0: ICMP echo request, id 20807, seq 194, length 64
14:16:46.873421 IP 192.168.254.1 > 192.168.254.255: ICMP echo request, id 26632, seq 17441, length 64
```

12)

a)

b) Each connection was ~ .0002 seconds long

c) 60 packets per server.

```
==============================================================
UDP connection info:
60 UDP connections traced:
UDP connection 1:
        host a:        192.168.254.15:49297
        host b:        192.168.254.254:53

        first packet:  Fri Jan 24 14:25:56.827846 2020
        last packet:   Fri Jan 24 14:25:56.828083 2020
        elapsed time:  0:00:00.000237
        total packets: 2
        filename:      /local/489labuser/Documents/CprE489_Lab1_Pics/pt12dump.du
mp
   a->b:                                b->a:
     total packets:             1           total packets:             1
     data bytes sent:          40           data bytes sent:          40
     throughput:           168776 Bps       throughput:           168776 Bps
==============================
```

```
[489labuser@co2061-15 ~]$ tcptrace /local/489labuser/Documents/CprE489_Lab1_Pics
/pt12dump.dump
1 arg remaining, starting with '/local/489labuser/Documents/CprE489_Lab1_Pics/pt
12dump.dump'
Ostermann's tcptrace -- version 6.6.7 -- Thu Nov  4, 2004

571 packets seen, 449 TCP packets traced
elapsed wallclock time: 0:00:00.043754, 13050 pkts/sec analyzed
trace file elapsed time: 0:00:06.133799
TCP connection info:
  1: co2061-15.ece.iastate.edu:39784 - lga15s46-in-f36.1e100.net:443 (a2b)
              24>   30<
  2: co2061-15.ece.iastate.edu:46092 - webdev-vip04.its.iastate.edu:443 (c2d)
              10>    9<  (complete)
  3: co2061-15.ece.iastate.edu:46094 - webdev-vip04.its.iastate.edu:443 (e2f)
               9>    8<  (complete)
  4: co2061-15.ece.iastate.edu:59354 - webdev-pool05.its.iastate.edu:443 (g2h)
              10>    9<  (complete)
  5: co2061-15.ece.iastate.edu:59356 - webdev-pool05.its.iastate.edu:443 (i2j)
              10>    9<  (complete)
  6: co2061-15.ece.iastate.edu:59358 - webdev-pool05.its.iastate.edu:443 (k2l)
              10>    9<  (complete)
  7: co2061-15.ece.iastate.edu:59360 - webdev-pool05.its.iastate.edu:443 (m2n)
              10>    9<  (complete)
  8: co2061-15.ece.iastate.edu:56820 - vip0x018.map2.ssl.hwcdn.net:443 (o2p)
               9>    7<  (complete)  (reset)
```

13)

a) Each packet contains 98 bytes.

b) Sample of output:

1: 14:43:33.514644000

2: 14:43:48.530143000

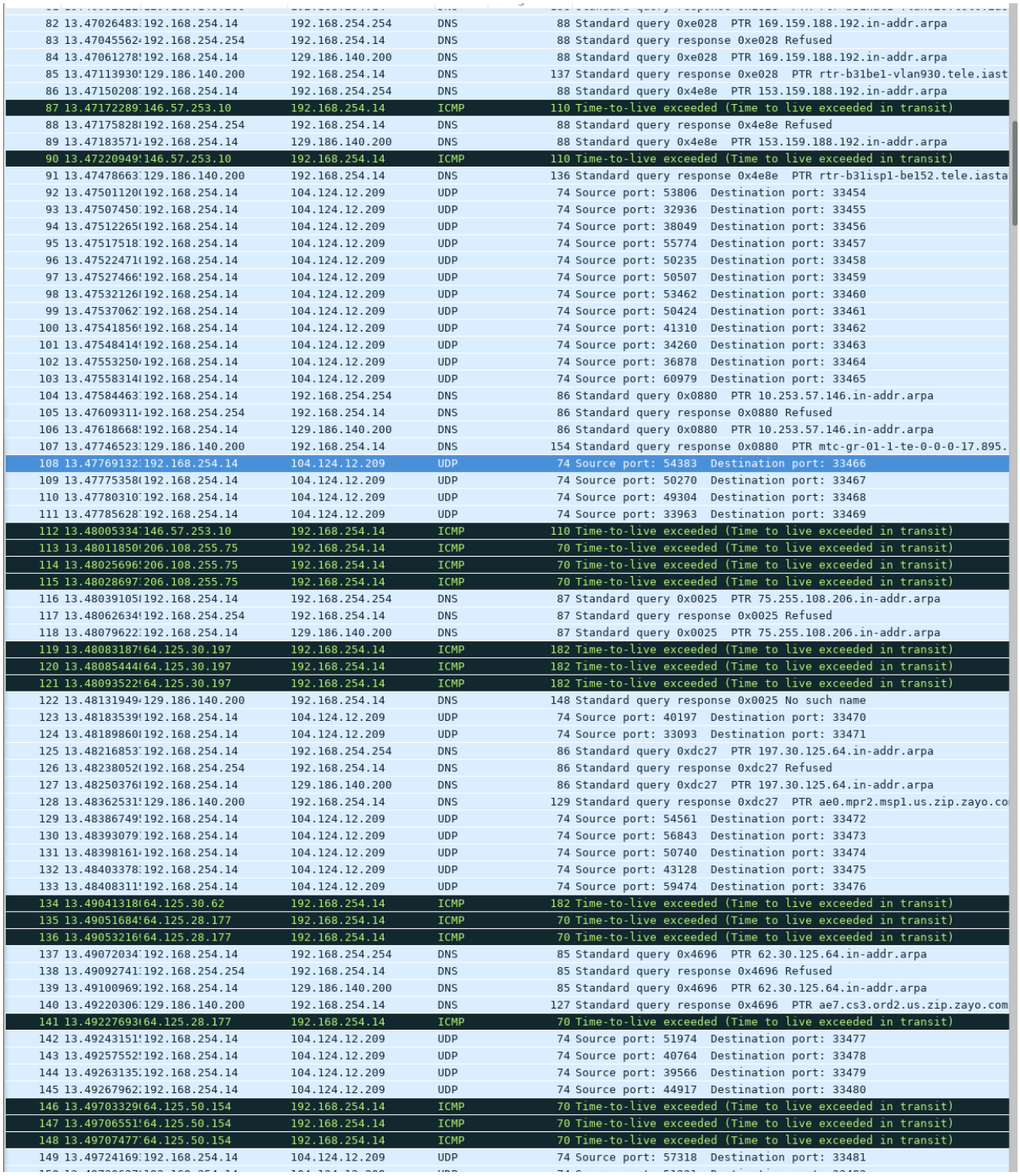
3: 14:43:33.933217000

4: 14:44.02.953638000

5: 14:44:03.545742000

```
[489labuser@co2061-15 ~]$ sudo tcpdump -w - > /local/489labuser/Documents/CprE48
9_Lab1_Pics/pt13.dump
[sudo] password for 489labuser:
tcpdump: listening on enp0s31f6, link-type EN10MB (Ethernet), capture size 26214
4 bytes
^C28 packets captured
28 packets received by filter
```

14) Traceroute sends UDP packets, tcptraceroute sends TCP packets.



82	13.47026483	192.168.254.14	192.168.254.254	DNS	88 Standard query 0xe028 PTR 169.159.188.192.in-addr.arpa
83	13.47045562	192.168.254.254	192.168.254.14	DNS	88 Standard query response 0xe028 Refused
84	13.47061278	192.168.254.14	129.186.140.200	DNS	88 Standard query 0xe028 PTR 169.159.188.192.in-addr.arpa
85	13.47113930	129.186.140.200	192.168.254.14	DNS	137 Standard query response 0xe028 PTR rtr-b31be1-vlan930.tele.iast
86	13.47150208	192.168.254.14	192.168.254.254	DNS	88 Standard query 0x4e8e PTR 153.159.188.192.in-addr.arpa
87	13.47172289	146.57.253.10	192.168.254.14	ICMP	110 Time-to-live exceeded (Time to live exceeded in transit)
88	13.47175828	192.168.254.254	192.168.254.14	DNS	88 Standard query response 0x4e8e Refused
89	13.47183571	192.168.254.14	129.186.140.200	DNS	88 Standard query 0x4e8e PTR 153.159.188.192.in-addr.arpa
90	13.47220949	146.57.253.10	192.168.254.14	ICMP	110 Time-to-live exceeded (Time to live exceeded in transit)
91	13.47478663	129.186.140.200	192.168.254.14	DNS	136 Standard query response 0x4e8e PTR rtr-b31isp1-be152.tele.iasta
92	13.47501120	192.168.254.14	104.124.12.209	UDP	74 Source port: 53806 Destination port: 33454
93	13.47507450	192.168.254.14	104.124.12.209	UDP	74 Source port: 32936 Destination port: 33455
94	13.47512265	192.168.254.14	104.124.12.209	UDP	74 Source port: 38049 Destination port: 33456
95	13.47517518	192.168.254.14	104.124.12.209	UDP	74 Source port: 55774 Destination port: 33457
96	13.47522471	192.168.254.14	104.124.12.209	UDP	74 Source port: 50235 Destination port: 33458
97	13.47527466	192.168.254.14	104.124.12.209	UDP	74 Source port: 50507 Destination port: 33459
98	13.47532126	192.168.254.14	104.124.12.209	UDP	74 Source port: 53462 Destination port: 33460
99	13.47537062	192.168.254.14	104.124.12.209	UDP	74 Source port: 50424 Destination port: 33461
100	13.47541856	192.168.254.14	104.124.12.209	UDP	74 Source port: 41310 Destination port: 33462
101	13.47548414	192.168.254.14	104.124.12.209	UDP	74 Source port: 34260 Destination port: 33463
102	13.47553250	192.168.254.14	104.124.12.209	UDP	74 Source port: 36878 Destination port: 33464
103	13.47558314	192.168.254.14	104.124.12.209	UDP	74 Source port: 60979 Destination port: 33465
104	13.47584463	192.168.254.14	192.168.254.254	DNS	86 Standard query 0x0880 PTR 10.253.57.146.in-addr.arpa
105	13.47609311	192.168.254.254	192.168.254.14	DNS	86 Standard query response 0x0880 Refused
106	13.47618668	192.168.254.14	129.186.140.200	DNS	86 Standard query 0x0880 PTR 10.253.57.146.in-addr.arpa
107	13.47746523	129.186.140.200	192.168.254.14	DNS	154 Standard query response 0x0880 PTR mtc-gr-01-1-te-0-0-0-17.895.
108	13.47769132	192.168.254.14	104.124.12.209	UDP	74 Source port: 54383 Destination port: 33466
109	13.47775358	192.168.254.14	104.124.12.209	UDP	74 Source port: 50270 Destination port: 33467
110	13.47780310	192.168.254.14	104.124.12.209	UDP	74 Source port: 49304 Destination port: 33468
111	13.47785628	192.168.254.14	104.124.12.209	UDP	74 Source port: 33963 Destination port: 33469
112	13.48005334	146.57.253.10	192.168.254.14	ICMP	110 Time-to-live exceeded (Time to live exceeded in transit)
113	13.48011850	206.108.255.75	192.168.254.14	ICMP	70 Time-to-live exceeded (Time to live exceeded in transit)
114	13.48025696	206.108.255.75	192.168.254.14	ICMP	70 Time-to-live exceeded (Time to live exceeded in transit)
115	13.48028697	206.108.255.75	192.168.254.14	ICMP	70 Time-to-live exceeded (Time to live exceeded in transit)
116	13.48039105	192.168.254.14	192.168.254.254	DNS	87 Standard query 0x0025 PTR 75.255.108.206.in-addr.arpa
117	13.48062634	192.168.254.254	192.168.254.14	DNS	87 Standard query response 0x0025 Refused
118	13.48079622	192.168.254.14	129.186.140.200	DNS	87 Standard query 0x0025 PTR 75.255.108.206.in-addr.arpa
119	13.48083187	64.125.30.197	192.168.254.14	ICMP	182 Time-to-live exceeded (Time to live exceeded in transit)
120	13.48085444	64.125.30.197	192.168.254.14	ICMP	182 Time-to-live exceeded (Time to live exceeded in transit)
121	13.48093522	64.125.30.197	192.168.254.14	ICMP	182 Time-to-live exceeded (Time to live exceeded in transit)
122	13.48131949	129.186.140.200	192.168.254.14	DNS	148 Standard query response 0x0025 No such name
123	13.48183539	192.168.254.14	104.124.12.209	UDP	74 Source port: 40197 Destination port: 33470
124	13.48189860	192.168.254.14	104.124.12.209	UDP	74 Source port: 33093 Destination port: 33471
125	13.48216853	192.168.254.14	192.168.254.254	DNS	86 Standard query 0xdc27 PTR 197.30.125.64.in-addr.arpa
126	13.48238052	192.168.254.254	192.168.254.14	DNS	86 Standard query response 0xdc27 Refused
127	13.48250376	192.168.254.14	129.186.140.200	DNS	86 Standard query 0xdc27 PTR 197.30.125.64.in-addr.arpa
128	13.48362531	129.186.140.200	192.168.254.14	DNS	129 Standard query response 0xdc27 PTR ae0.mpr2.msp1.us.zip.zayo.co
129	13.48386749	192.168.254.14	104.124.12.209	UDP	74 Source port: 54561 Destination port: 33472
130	13.48393079	192.168.254.14	104.124.12.209	UDP	74 Source port: 56843 Destination port: 33473
131	13.48398161	192.168.254.14	104.124.12.209	UDP	74 Source port: 50740 Destination port: 33474
132	13.48403378	192.168.254.14	104.124.12.209	UDP	74 Source port: 43128 Destination port: 33475
133	13.48408311	192.168.254.14	104.124.12.209	UDP	74 Source port: 59474 Destination port: 33476
134	13.49041318	64.125.30.62	192.168.254.14	ICMP	182 Time-to-live exceeded (Time to live exceeded in transit)
135	13.49051684	64.125.28.177	192.168.254.14	ICMP	70 Time-to-live exceeded (Time to live exceeded in transit)
136	13.49053216	64.125.28.177	192.168.254.14	ICMP	70 Time-to-live exceeded (Time to live exceeded in transit)
137	13.49072034	192.168.254.14	192.168.254.254	DNS	85 Standard query 0x4696 PTR 62.30.125.64.in-addr.arpa
138	13.49092741	192.168.254.254	192.168.254.14	DNS	85 Standard query response 0x4696 Refused
139	13.49100969	192.168.254.14	129.186.140.200	DNS	85 Standard query 0x4696 PTR 62.30.125.64.in-addr.arpa
140	13.49220306	129.186.140.200	192.168.254.14	DNS	127 Standard query response 0x4696 PTR ae7.cs3.ord2.us.zip.zayo.com
141	13.49227693	64.125.28.177	192.168.254.14	ICMP	70 Time-to-live exceeded (Time to live exceeded in transit)
142	13.49243151	192.168.254.14	104.124.12.209	UDP	74 Source port: 51974 Destination port: 33477
143	13.49257552	192.168.254.14	104.124.12.209	UDP	74 Source port: 40764 Destination port: 33478
144	13.49263135	192.168.254.14	104.124.12.209	UDP	74 Source port: 39566 Destination port: 33479
145	13.49267962	192.168.254.14	104.124.12.209	UDP	74 Source port: 44917 Destination port: 33480
146	13.49703329	64.125.50.154	192.168.254.14	ICMP	70 Time-to-live exceeded (Time to live exceeded in transit)
147	13.49706551	64.125.50.154	192.168.254.14	ICMP	70 Time-to-live exceeded (Time to live exceeded in transit)
148	13.49707477	64.125.50.154	192.168.254.14	ICMP	70 Time-to-live exceeded (Time to live exceeded in transit)
149	13.49724169	192.168.254.14	104.124.12.209	UDP	74 Source port: 57318 Destination port: 33481