

CS3205: INTRODUCTION TO COMPUTER NETWORKS

ASSIGNMENT 1

CHOSEN DOMAINS AND THEIR LOCATIONS:

- 1) **indianchemicalsociety.com** – India
- 2) **ifeng.com** – China, Asia
- 3) **willhaben.at** – Austria, Europe
- 4) **www.aip.org** – North America
- 5) **uq.edu.au** - Australia, Pacific Region

OBSERVATIONS MADE ABOUT THE PING TEST:

- The time taken for each of the 10 packets is almost the same, with minor fluctuations.
- The TTL value always stays the same for each ping test.
- Ping time increases with distance as the distance to the server increases.

OBSERVATIONS MADE ABOUT THE NSLOOKUP:

- The nslookup lists all available connections for the current system.
- The MAC Address was found to be as follows: **9c:b6:d0:f4:bf:3d**
- The IP Address was found to be as follows: **10.22.42.60**
- Each NS Lookup returns two parameters: the local IP address and the IP address of the website.

OBSERVATIONS MADE ABOUT TRACEROUTING:

- The network sends a packet of increasing TTL value, until the final server is reached.
- Some packets may timeout due to rejection by the server, which appear as asterisks on the terminal window. This is perhaps due to security measures, or due to packet loss.
- We observe that **Number of Hops + TTL = Packet Size (64 bytes usually)**

SCREENSHOTS:

1) PING TEST:

```
arjun@arjun-XPS-13-9360:~$ ping indianchemicalsociety.com -c 10
PING indianchemicalsociety.com (148.66.138.165) 56(84) bytes of data.
64 bytes from 148.66.138.165: icmp_seq=1 ttl=45 time=69.5 ms
64 bytes from 148.66.138.165: icmp_seq=2 ttl=45 time=66.9 ms
64 bytes from 148.66.138.165: icmp_seq=3 ttl=45 time=67.1 ms
64 bytes from 148.66.138.165: icmp_seq=4 ttl=45 time=67.9 ms
64 bytes from 148.66.138.165: icmp_seq=5 ttl=45 time=70.6 ms
64 bytes from 148.66.138.165: icmp_seq=6 ttl=45 time=74.7 ms
64 bytes from 148.66.138.165: icmp_seq=7 ttl=45 time=69.4 ms
64 bytes from 148.66.138.165: icmp_seq=8 ttl=45 time=67.8 ms
64 bytes from 148.66.138.165: icmp_seq=9 ttl=45 time=90.7 ms
64 bytes from 148.66.138.165: icmp_seq=10 ttl=45 time=71.9 ms

--- indianchemicalsociety.com ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9011ms
rtt min/avg/max/mdev = 66.925/71.700/90.710/6.736 ms
arjun@arjun-XPS-13-9360:~$
```

```
arjun@arjun-XPS-13-9360:~$ ping ifeng.com -c 10
PING ifeng.com (123.103.122.24) 56(84) bytes of data.
64 bytes from 123.103.122.24-BJ-CNC (123.103.122.24): icmp_seq=1 ttl=41 time=258 ms
64 bytes from 123.103.122.24-BJ-CNC (123.103.122.24): icmp_seq=3 ttl=41 time=321 ms
64 bytes from 123.103.122.24-BJ-CNC (123.103.122.24): icmp_seq=4 ttl=41 time=342 ms
64 bytes from 123.103.122.24-BJ-CNC (123.103.122.24): icmp_seq=5 ttl=41 time=369 ms
64 bytes from 123.103.122.24-BJ-CNC (123.103.122.24): icmp_seq=6 ttl=41 time=257 ms
64 bytes from 123.103.122.24-BJ-CNC (123.103.122.24): icmp_seq=7 ttl=41 time=268 ms
64 bytes from 123.103.122.24-BJ-CNC (123.103.122.24): icmp_seq=8 ttl=41 time=331 ms
64 bytes from 123.103.122.24-BJ-CNC (123.103.122.24): icmp_seq=9 ttl=41 time=352 ms
64 bytes from 123.103.122.24-BJ-CNC (123.103.122.24): icmp_seq=10 ttl=41 time=374 ms

--- ifeng.com ping statistics ---
10 packets transmitted, 9 received, 10% packet loss, time 10268ms
rtt min/avg/max/mdev = 257.876/319.555/374.590/43.915 ms
arjun@arjun-XPS-13-9360:~$
```

```
arjun@arjun-XPS-13-9360:~$ ping willhaben.at -c 10
PING willhaben.at (194.232.21.191) 56(84) bytes of data.
64 bytes from 194.232.21.191: icmp_seq=1 ttl=43 time=200 ms
64 bytes from 194.232.21.191: icmp_seq=2 ttl=43 time=214 ms
64 bytes from 194.232.21.191: icmp_seq=3 ttl=43 time=281 ms
64 bytes from 194.232.21.191: icmp_seq=4 ttl=43 time=324 ms
64 bytes from 194.232.21.191: icmp_seq=5 ttl=43 time=361 ms
64 bytes from 194.232.21.191: icmp_seq=6 ttl=43 time=198 ms
64 bytes from 194.232.21.191: icmp_seq=7 ttl=43 time=224 ms
64 bytes from 194.232.21.191: icmp_seq=8 ttl=43 time=256 ms
64 bytes from 194.232.21.191: icmp_seq=9 ttl=43 time=266 ms
64 bytes from 194.232.21.191: icmp_seq=10 ttl=43 time=298 ms

--- willhaben.at ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9021ms
rtt min/avg/max/mdev = 198.052/262.546/361.356/51.997 ms
arjun@arjun-XPS-13-9360:~$
```

```
arjun@arjun-XPS-13-9360:~$ ping www.aip.org -c 10
PING www.aip.org (34.225.67.115) 56(84) bytes of data.
64 bytes from ec2-34-225-67-115.compute-1.amazonaws.com (34.225.67.115): icmp_seq=1 ttl=43 time=287 ms
64 bytes from ec2-34-225-67-115.compute-1.amazonaws.com (34.225.67.115): icmp_seq=2 ttl=43 time=318 ms
64 bytes from ec2-34-225-67-115.compute-1.amazonaws.com (34.225.67.115): icmp_seq=3 ttl=43 time=306 ms
64 bytes from ec2-34-225-67-115.compute-1.amazonaws.com (34.225.67.115): icmp_seq=4 ttl=43 time=274 ms
64 bytes from ec2-34-225-67-115.compute-1.amazonaws.com (34.225.67.115): icmp_seq=5 ttl=43 time=301 ms
64 bytes from ec2-34-225-67-115.compute-1.amazonaws.com (34.225.67.115): icmp_seq=6 ttl=43 time=288 ms
64 bytes from ec2-34-225-67-115.compute-1.amazonaws.com (34.225.67.115): icmp_seq=7 ttl=43 time=323 ms
64 bytes from ec2-34-225-67-115.compute-1.amazonaws.com (34.225.67.115): icmp_seq=8 ttl=43 time=368 ms
64 bytes from ec2-34-225-67-115.compute-1.amazonaws.com (34.225.67.115): icmp_seq=9 ttl=43 time=390 ms
64 bytes from ec2-34-225-67-115.compute-1.amazonaws.com (34.225.67.115): icmp_seq=10 ttl=43 time=243 ms

--- www.aip.org ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9010ms
rtt min/avg/max/mdev = 243.945/310.343/390.674/41.091 ms
arjun@arjun-XPS-13-9360:~$
```

```
arjun@arjun-XPS-13-9360:~$ ping uq.edu.au -c 10
PING uq.edu.au (130.102.184.3) 56(84) bytes of data.
64 bytes from poche-centre.uq.edu.au (130.102.184.3): icmp_seq=1 ttl=222 time=425 ms
64 bytes from poche-centre.uq.edu.au (130.102.184.3): icmp_seq=2 ttl=222 time=413 ms
64 bytes from poche-centre.uq.edu.au (130.102.184.3): icmp_seq=3 ttl=222 time=447 ms
64 bytes from poche-centre.uq.edu.au (130.102.184.3): icmp_seq=4 ttl=222 time=485 ms
64 bytes from poche-centre.uq.edu.au (130.102.184.3): icmp_seq=5 ttl=222 time=521 ms
64 bytes from poche-centre.uq.edu.au (130.102.184.3): icmp_seq=6 ttl=222 time=544 ms
64 bytes from poche-centre.uq.edu.au (130.102.184.3): icmp_seq=7 ttl=222 time=354 ms
64 bytes from poche-centre.uq.edu.au (130.102.184.3): icmp_seq=8 ttl=222 time=376 ms
64 bytes from poche-centre.uq.edu.au (130.102.184.3): icmp_seq=9 ttl=222 time=400 ms
64 bytes from poche-centre.uq.edu.au (130.102.184.3): icmp_seq=10 ttl=222 time=423 ms

--- uq.edu.au ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 11677ms
rtt min/avg/max/mdev = 354.762/439.250/544.078/57.969 ms
arjun@arjun-XPS-13-9360:~$
```

2. NSLOOKUP TESTS:

```
arjun@arjun-XPS-13-9360:~$ nslookup indianchemicalsociety.com
Server:          127.0.1.1
Address:         127.0.1.1#53

Non-authoritative answer:
Name:   indianchemicalsociety.com
Address: 148.66.138.165

arjun@arjun-XPS-13-9360:~$
```

```
arjun@arjun-XPS-13-9360:~$ nslookup ifeng.com
Server:          127.0.1.1
Address:         127.0.1.1#53

Non-authoritative answer:
Name:   ifeng.com
Address: 123.103.122.24

arjun@arjun-XPS-13-9360:~$
```

```
arjun@arjun-XPS-13-9360:~$ nslookup willhaben.at
Server:          127.0.1.1
Address:         127.0.1.1#53

Non-authoritative answer:
Name:   willhaben.at
Address: 194.232.21.191

arjun@arjun-XPS-13-9360:~$
```

```
arjun@arjun-XPS-13-9360:~$ nslookup www.aip.org
Server:          127.0.1.1
Address:         127.0.1.1#53

Non-authoritative answer:
Name:   www.aip.org
Address: 34.225.67.115

arjun@arjun-XPS-13-9360:~$
```

```
arjun@arjun-XPS-13-9360:~$ nslookup uq.edu.au
Server:           127.0.1.1
Address:          127.0.1.1#53

Non-authoritative answer:
Name:   uq.edu.au
Address: 130.102.184.3

arjun@arjun-XPS-13-9360:~$ █
```

3) TRACE TESTS:

- www.indianchemicalsociety.com

```
arjun@arjun-XPS-13-9360:~$ sudo traceroute -I indianchemicalsociety.com
traceroute to indianchemicalsociety.com (148.66.138.165), 30 hops max, 60 byte packets
 1  10.22.43.254 (10.22.43.254)  4.377 ms  4.817 ms  5.251 ms
 2  10.25.100.1 (10.25.100.1)  3.885 ms  4.051 ms  4.163 ms
 3  10.26.0.14 (10.26.0.14)  3.930 ms  3.808 ms  3.686 ms
 4  10.119.232.138 (10.119.232.138)  4.315 ms  4.436 ms  5.191 ms
 5  10.119.232.137 (10.119.232.137)  7.304 ms  10.950 ms  11.236 ms
 6  10.163.255.201 (10.163.255.201)  12.484 ms  10.669 ms  10.610 ms
 7  10.119.73.122 (10.119.73.122)  10.868 ms  11.173 ms  11.264 ms
 8  125.22.85.29 (125.22.85.29)  53.278 ms  40.965 ms  40.941 ms
 9  182.79.224.183 (182.79.224.183)  74.335 ms  74.200 ms  92.413 ms
10  27.111.228.105 (27.111.228.105)  74.582 ms  69.917 ms  69.919 ms
11  148.72.204.1 (148.72.204.1)  71.048 ms  65.399 ms  65.419 ms
12  10.242.0.41 (10.242.0.41)  69.840 ms  69.465 ms  69.506 ms
13  10.253.0.42 (10.253.0.42)  61.110 ms  66.795 ms  68.243 ms
14  10.253.0.29 (10.253.0.29)  73.035 ms  73.785 ms  69.725 ms
15  10.242.144.33 (10.242.144.33)  66.520 ms  67.286 ms  67.168 ms
16  10.243.0.89 (10.243.0.89)  70.182 ms  70.167 ms  70.158 ms
17  148.66.138.165 (148.66.138.165)  65.348 ms  65.944 ms  67.083 ms
```

```
arjun@arjun-XPS-13-9360:~$ sudo traceroute -I indianchemicalsociety.com
traceroute to indianchemicalsociety.com (148.66.138.165), 30 hops max, 60 byte packets
 1  10.22.43.254 (10.22.43.254)  2.306 ms  2.304 ms  3.414 ms
 2  10.25.100.1 (10.25.100.1)  1.556 ms  1.633 ms  1.749 ms
 3  10.26.0.14 (10.26.0.14)  1.440 ms  1.347 ms  1.408 ms
 4  10.119.232.138 (10.119.232.138)  1.722 ms  1.819 ms  1.856 ms
 5  10.119.232.137 (10.119.232.137)  3.970 ms  4.889 ms  11.189 ms
 6  10.163.255.201 (10.163.255.201)  12.101 ms  14.560 ms  15.586 ms
 7  10.119.73.122 (10.119.73.122)  19.120 ms  23.432 ms  23.970 ms
 8  aes-static-029.85.22.125.airtel.in (125.22.85.29)  41.650 ms  41.949 ms  42.870 ms
 9  182.79.224.183 (182.79.224.183)  74.934 ms  70.673 ms  92.258 ms
10  26496.sgw.equinix.com (27.111.228.105)  80.005 ms  84.541 ms  84.524 ms
11  148.72.204.1 (148.72.204.1)  84.829 ms  82.169 ms  92.338 ms
12  10.242.0.41 (10.242.0.41)  96.970 ms  102.653 ms  99.705 ms
13  10.253.0.42 (10.253.0.42)  87.997 ms  92.552 ms  92.863 ms
14  10.253.0.29 (10.253.0.29)  101.328 ms  81.801 ms  76.842 ms
15  10.242.144.33 (10.242.144.33)  67.788 ms  67.182 ms  71.387 ms
16  10.243.0.89 (10.243.0.89)  77.380 ms  73.041 ms  73.171 ms
17  148.66.138.165 (148.66.138.165)  69.046 ms  68.101 ms  67.829 ms
```

```
arjun@arjun-XPS-13-9360:~$ sudo traceroute -I indianchemicalsociety.com
traceroute to indianchemicalsociety.com (148.66.138.165), 30 hops max, 60 byte packets
 1  10.22.43.254 (10.22.43.254)  2.288 ms  2.436 ms  2.924 ms
 2  10.25.100.1 (10.25.100.1)  1.340 ms  1.459 ms  1.495 ms
 3  10.26.0.14 (10.26.0.14)  1.880 ms  1.702 ms  1.674 ms
 4  10.119.232.138 (10.119.232.138)  1.883 ms  2.015 ms  2.182 ms
 5  10.119.232.137 (10.119.232.137)  2.492 ms  3.074 ms  3.252 ms
 6  10.163.255.201 (10.163.255.201)  3.794 ms  3.702 ms  3.663 ms
 7  10.119.73.122 (10.119.73.122)  4.989 ms  5.049 ms  6.781 ms
 8  aes-static-029.85.22.125.airtel.in (125.22.85.29)  40.955 ms  42.587 ms  42.978 ms
 9  182.79.224.183 (182.79.224.183)  71.907 ms  67.145 ms  67.304 ms
10  26496.sgw.equinix.com (27.111.228.105)  64.966 ms  65.774 ms  65.762 ms
11  148.72.204.1 (148.72.204.1)  66.127 ms  67.009 ms  66.967 ms
12  10.242.0.41 (10.242.0.41)  70.730 ms  72.554 ms  72.394 ms
13  10.253.0.42 (10.253.0.42)  61.467 ms  61.280 ms  60.952 ms
14  10.253.0.29 (10.253.0.29)  68.932 ms  69.310 ms  69.355 ms
15  10.242.144.33 (10.242.144.33)  66.412 ms  67.206 ms  67.234 ms
16  10.243.0.89 (10.243.0.89)  70.113 ms  73.416 ms  73.495 ms
17  148.66.138.165 (148.66.138.165)  68.342 ms  68.065 ms  66.488 ms
arjun@arjun-XPS-13-9360:~$
```


- www.ifeng.com

```

arjun@arjun-XPS-13-9360:~$ sudo traceroute -I ifeng.com
traceroute to ifeng.com (123.103.122.24), 30 hops max, 60 byte packets
 1  10.22.43.254 (10.22.43.254)  2.108 ms  2.479 ms  2.841 ms
 2  10.25.100.1 (10.25.100.1)  5.727 ms  5.743 ms  5.785 ms
 3  10.26.0.14 (10.26.0.14)  1.692 ms  1.493 ms  1.404 ms
 4  10.119.232.138 (10.119.232.138)  5.832 ms  5.915 ms  6.010 ms
 5  10.119.232.137 (10.119.232.137)  3.125 ms  3.222 ms  3.600 ms
 6  10.163.255.201 (10.163.255.201)  3.812 ms  2.701 ms  2.952 ms
 7  10.119.73.122 (10.119.73.122)  3.802 ms  3.621 ms  3.643 ms
 8  aes-static-029.85.22.125.airtel.in (125.22.85.29)  41.606 ms  41.659 ms  42.256 ms
 9  182.79.146.224 (182.79.146.224)  282.887 ms  282.998 ms  283.234 ms
10  hu0-1-0-0.rcr21.b015591-1.lon01.atlas.cogentco.com (149.6.186.137)  283.838 ms  283.093 ms  278.434 ms
11  be2602.ccr22.lon01.atlas.cogentco.com (154.54.38.109)  278.228 ms  276.177 ms  271.044 ms
12  be2867.rcr21.b015533-1.lon01.atlas.cogentco.com (154.54.56.242)  274.760 ms  267.040 ms  267.929 ms
13  chinatelecom.demarc.cogentco.com (149.14.81.226)  272.467 ms  249.990 ms  250.136 ms
14  202.97.52.25 (202.97.52.25)  442.608 ms  370.031 ms  370.274 ms
15  202.97.85.61 (202.97.85.61)  369.123 ms  367.197 ms  367.733 ms
16  202.97.48.245 (202.97.48.245)  344.377 ms * 341.781 ms
17  * * *
18  * * *
19  * * *
20  * * *
21  * * *
22  123.103.121.42-BJ-CNC (123.103.121.42)  538.709 ms * 538.721 ms
23  123.103.122.24-BJ-CNC (123.103.122.24)  536.048 ms * 535.916 ms

```

```

arjun@arjun-XPS-13-9360:~$ sudo traceroute -I ifeng.com
traceroute to ifeng.com (123.103.122.24), 30 hops max, 60 byte packets
 1  10.22.43.254 (10.22.43.254)  4.586 ms  4.575 ms  4.601 ms
 2  10.25.100.1 (10.25.100.1)  3.124 ms  3.185 ms  3.709 ms
 3  10.26.0.14 (10.26.0.14)  3.592 ms  3.198 ms  3.740 ms
 4  10.119.232.138 (10.119.232.138)  3.852 ms  3.956 ms  3.985 ms
 5  10.119.232.137 (10.119.232.137)  3.152 ms  6.855 ms  9.339 ms
 6  10.163.255.201 (10.163.255.201)  11.708 ms  12.128 ms  16.461 ms
 7  10.119.73.122 (10.119.73.122)  16.573 ms  20.116 ms  21.207 ms
 8  aes-static-029.85.22.125.airtel.in (125.22.85.29)  42.212 ms  44.755 ms  44.693 ms
 9  182.79.146.224 (182.79.146.224)  317.264 ms  317.324 ms  300.071 ms
10  hu0-1-0-0.rcr21.b015591-1.lon01.atlas.cogentco.com (149.6.186.137)  300.615 ms  277.099 ms  278.601 ms
11  be2602.ccr22.lon01.atlas.cogentco.com (154.54.38.109)  274.005 ms  278.238 ms  280.601 ms
12  be2867.rcr21.b015533-1.lon01.atlas.cogentco.com (154.54.56.242)  280.696 ms  279.568 ms  279.606 ms
13  chinatelecom.demarc.cogentco.com (149.14.81.226)  294.470 ms  296.278 ms  298.821 ms
14  202.97.52.25 (202.97.52.25)  364.314 ms  368.548 ms  368.550 ms
15  202.97.85.61 (202.97.85.61)  367.523 ms  366.974 ms  366.972 ms
16  * 202.97.48.245 (202.97.48.245)  334.679 ms  335.813 ms
17  * * *
18  * * *
19  218.30.102.114 (218.30.102.114)  346.423 ms * 333.704 ms
20  * * *
21  * * *
22  123.103.121.42-BJ-CNC (123.103.121.42)  324.907 ms  322.496 ms *
23  * * 123.103.122.24-BJ-CNC (123.103.122.24)  305.738 ms
arjun@arjun-XPS-13-9360:~$ 

```

```

arjun@arjun-XPS-13-9360:~$ sudo traceroute -I ifeng.com
traceroute to ifeng.com (123.103.122.24), 30 hops max, 60 byte packets
 1  10.22.43.254 (10.22.43.254)  2.443 ms  2.422 ms  3.326 ms
 2  10.25.100.1 (10.25.100.1)  1.375 ms  1.440 ms  1.781 ms
 3  10.26.0.14 (10.26.0.14)  1.712 ms  1.674 ms  1.616 ms
 4  10.119.232.138 (10.119.232.138)  1.770 ms  2.000 ms  2.048 ms
 5  10.119.232.137 (10.119.232.137)  4.951 ms  5.139 ms  5.325 ms
 6  10.163.255.201 (10.163.255.201)  4.325 ms  3.260 ms  4.535 ms
 7  10.119.73.122 (10.119.73.122)  4.651 ms  4.847 ms  5.013 ms
 8  aes-static-029.85.22.125.airtel.in (125.22.85.29)  41.288 ms  41.334 ms  41.230 ms
 9  182.79.146.224 (182.79.146.224)  199.370 ms  196.159 ms  196.341 ms
10  hu0-1-0-0.rcr21.b015591-1.lon01.atlas.cogentco.com (149.6.186.137)  258.721 ms  258.700 ms  258.714 ms
11  be2602.ccr22.lon01.atlas.cogentco.com (154.54.38.109)  257.381 ms  257.353 ms  257.810 ms
12  be2867.rcr21.b015533-1.lon01.atlas.cogentco.com (154.54.56.242)  258.718 ms  262.265 ms  262.239 ms
13  chinatelecom.demarc.cogentco.com (149.14.81.226)  179.727 ms  154.857 ms  155.026 ms
14  202.97.52.25 (202.97.52.25)  366.201 ms  429.327 ms  368.681 ms
15  202.97.85.61 (202.97.85.61)  368.695 ms  369.062 ms  369.307 ms
16  * * *
17  * * *
18  * * *
19  * * 218.30.102.114 (218.30.102.114)  424.156 ms
20  * * *
21  * * *
22  123.103.121.42-BJ-CNC (123.103.121.42)  320.214 ms  320.750 ms *
23  * * *
24  123.103.122.24-BJ-CNC (123.103.122.24)  319.631 ms * *
arjun@arjun-XPS-13-9360:~$ 

```

- www.willhaben.at

```
arjun@arjun-XPS-13-9360:~$ sudo traceroute -I willhaben.at
traceroute to willhaben.at (194.232.21.191), 30 hops max, 60 byte packets
 1  10.22.43.254 (10.22.43.254)  2.438 ms  4.798 ms  4.844 ms
 2  10.25.100.1 (10.25.100.1)  1.399 ms  1.513 ms  1.865 ms
 3  10.26.0.14 (10.26.0.14)  1.700 ms  1.569 ms  1.489 ms
 4  10.119.232.138 (10.119.232.138)  1.859 ms  2.005 ms  2.170 ms
 5  10.119.232.137 (10.119.232.137)  15.716 ms  15.958 ms  20.295 ms
 6  10.163.255.201 (10.163.255.201)  4.888 ms  3.802 ms  3.753 ms
 7  10.119.73.122 (10.119.73.122)  4.412 ms  4.378 ms  4.615 ms
 8  aes-static-029.85.22.125.airtel.in (125.22.85.29)  40.394 ms  40.431 ms  40.686 ms
 9  static-82-79-134-246.rdsnet.ro (82.79.134.246)  279.011 ms  275.353 ms  275.624 ms
10  de-cix.r06.inx.fra.de.nextlayer.net (80.81.194.56)  261.143 ms  261.317 ms  261.477 ms
11  ae1-0-r33.inx.vie.nextlayer.net (92.60.0.213)  261.663 ms  261.833 ms  262.249 ms
12  apa.customers.nextlayer.net (213.208.138.74)  262.049 ms  261.369 ms  262.426 ms
13  rou-vie-edge-101.apa.net (194.158.150.97)  254.220 ms  241.495 ms  241.846 ms
14  rou-vie-pe-101.apa.net (194.158.150.61)  240.425 ms  155.600 ms  154.625 ms
15  c65-rz1-1.apa.net (194.158.150.113)  155.765 ms  272.502 ms  272.523 ms
16  shared003.apa.at (194.232.186.1)  272.827 ms  212.668 ms  213.136 ms
17  194.232.21.191 (194.232.21.191)  212.379 ms  209.767 ms  211.256 ms
arjun@arjun-XPS-13-9360:~$
```

```
arjun@arjun-XPS-13-9360:~$ sudo traceroute -I willhaben.at
traceroute to willhaben.at (194.232.21.191), 30 hops max, 60 byte packets
 1  10.22.43.254 (10.22.43.254)  3.032 ms  3.075 ms  3.190 ms
 2  10.25.100.1 (10.25.100.1)  2.189 ms  2.268 ms  2.484 ms
 3  10.26.0.14 (10.26.0.14)  2.345 ms  2.319 ms  2.241 ms
 4  10.119.232.138 (10.119.232.138)  2.512 ms  2.606 ms  2.716 ms
 5  10.119.232.137 (10.119.232.137)  3.907 ms  4.129 ms  4.494 ms
 6  10.163.255.201 (10.163.255.201)  5.381 ms  3.087 ms  3.364 ms
 7  10.119.73.122 (10.119.73.122)  3.495 ms  4.650 ms  4.894 ms
 8  aes-static-029.85.22.125.airtel.in (125.22.85.29)  40.537 ms  40.642 ms  40.845 ms
 9  static-82-79-134-246.rdsnet.ro (82.79.134.246)  308.167 ms  304.449 ms  304.625 ms
10  de-cix.r06.inx.fra.de.nextlayer.net (80.81.194.56)  295.969 ms  290.840 ms  291.175 ms
11  ae1-0-r33.inx.vie.nextlayer.net (92.60.0.213)  291.211 ms  284.573 ms  284.788 ms
12  apa.customers.nextlayer.net (213.208.138.74)  288.197 ms  286.138 ms  286.276 ms
13  rou-vie-edge-101.apa.net (194.158.150.97)  286.529 ms  271.808 ms  273.520 ms
14  rou-vie-pe-101.apa.net (194.158.150.61)  271.087 ms  165.089 ms  158.054 ms
15  c65-rz1-1.apa.net (194.158.150.113)  165.019 ms  208.803 ms  208.748 ms
16  shared003.apa.at (194.232.186.1)  165.271 ms  174.108 ms  174.071 ms
17  194.232.21.191 (194.232.21.191)  157.254 ms  154.948 ms  155.337 ms
arjun@arjun-XPS-13-9360:~$
```

```
arjun@arjun-XPS-13-9360:~$ sudo traceroute -I willhaben.at
traceroute to willhaben.at (194.232.21.191), 30 hops max, 60 byte packets
 1  10.22.43.254 (10.22.43.254)  2.386 ms  2.402 ms  3.000 ms
 2  10.25.100.1 (10.25.100.1)  1.194 ms  1.278 ms  1.317 ms
 3  10.26.0.14 (10.26.0.14)  1.503 ms  1.342 ms  1.618 ms
 4  10.119.232.138 (10.119.232.138)  1.638 ms  1.726 ms  1.852 ms
 5  10.119.232.137 (10.119.232.137)  2.552 ms  2.995 ms  3.305 ms
 6  10.163.255.201 (10.163.255.201)  3.915 ms  3.011 ms  3.299 ms
 7  10.119.73.122 (10.119.73.122)  3.675 ms  4.001 ms  3.993 ms
 8  aes-static-029.85.22.125.airtel.in (125.22.85.29)  62.613 ms  63.667 ms  63.903 ms
 9  static-82-79-134-246.rdsnet.ro (82.79.134.246)  215.326 ms  215.149 ms  215.240 ms
10  de-cix.r06.inx.fra.de.nextlayer.net (80.81.194.56)  196.711 ms  195.090 ms  194.995 ms
11  ae1-0-r33.inx.vie.nextlayer.net (92.60.0.213)  209.105 ms  216.012 ms  216.005 ms
12  apa.customers.nextlayer.net (213.208.138.74)  155.961 ms  157.177 ms  157.831 ms
13  rou-vie-edge-101.apa.net (194.158.150.97)  162.696 ms  161.593 ms  161.709 ms
14  rou-vie-pe-101.apa.net (194.158.150.61)  154.215 ms  154.819 ms  154.971 ms
15  c65-rz1-1.apa.net (194.158.150.113)  154.274 ms  155.007 ms  155.666 ms
16  shared003.apa.at (194.232.186.1)  161.470 ms  161.150 ms  161.421 ms
17  194.232.21.191 (194.232.21.191)  154.452 ms  245.969 ms  245.837 ms
arjun@arjun-XPS-13-9360:~$
```


- www.aip.org

```

arjun@arjun-XPS-13-9360:~$ sudo traceroute -I www.aip.org
traceroute to www.aip.org (34.225.67.115), 30 hops max, 60 byte packets
 1  10.22.43.254 (10.22.43.254)  3.157 ms  3.325 ms  4.188 ms
 2  10.25.100.1 (10.25.100.1)  2.320 ms  2.387 ms  2.614 ms
 3  10.26.0.14 (10.26.0.14)  2.525 ms  2.473 ms  2.435 ms
 4  10.119.232.138 (10.119.232.138)  2.872 ms  2.976 ms  3.001 ms
 5  10.119.232.137 (10.119.232.137)  5.383 ms  9.203 ms  9.337 ms
 6  10.163.255.201 (10.163.255.201)  9.611 ms  16.217 ms  17.228 ms
 7  10.119.73.122 (10.119.73.122)  24.774 ms  24.993 ms  27.246 ms
 8  115.248.104.230 (115.248.104.230)  19.312 ms  24.210 ms  12.304 ms
 9  * * *
10  62.216.147.73 (62.216.147.73)  55.609 ms  58.506 ms  61.621 ms
11  * xe-0-1-1.0.pjr03.ldn001.flagtel.com (85.95.26.233)  258.999 ms  259.115 ms
12  xe-8-3-2.0.pjr02.nyc005.flagtel.com (85.95.26.41)  266.956 ms  267.030 ms  267.237 ms
13  * * *
14  52.93.4.103 (52.93.4.103)  286.031 ms  286.133 ms  286.610 ms
15  52.93.4.0 (52.93.4.0)  283.836 ms  283.892 ms  284.070 ms
16  * * *
17  54.240.229.149 (54.240.229.149)  297.054 ms  297.765 ms  297.885 ms
18  * * *
19  * * *
20  * * *
21  * * *
22  * * *
23  * * *
24  * * *
25  * * *
26  * * *
27  * * *
28  52.93.28.84 (52.93.28.84)  333.856 ms  334.045 ms  333.954 ms
29  * * *
30  * * *
arjun@arjun-XPS-13-9360:~$

```

```

arjun@arjun-XPS-13-9360:~$ sudo traceroute -I www.aip.org
traceroute to www.aip.org (34.225.67.115), 30 hops max, 60 byte packets
 1  10.22.43.254 (10.22.43.254)  1.833 ms  2.430 ms  7.717 ms
 2  10.25.100.1 (10.25.100.1)  3.440 ms  3.519 ms  3.534 ms
 3  10.26.0.14 (10.26.0.14)  3.850 ms  3.777 ms  3.566 ms
 4  10.119.232.138 (10.119.232.138)  5.009 ms  5.073 ms  5.117 ms
 5  10.119.232.137 (10.119.232.137)  5.381 ms  5.612 ms  5.825 ms
 6  10.163.255.201 (10.163.255.201)  6.101 ms  4.781 ms  7.428 ms
 7  10.119.73.122 (10.119.73.122)  8.342 ms  8.592 ms  8.769 ms
 8  115.248.104.230 (115.248.104.230)  5.340 ms  7.832 ms  8.042 ms
 9  * * *
10  62.216.147.73 (62.216.147.73)  65.273 ms  65.318 ms  65.531 ms
11  * xe-0-1-1.0.pjr03.ldn001.flagtel.com (85.95.26.233)  250.451 ms  250.478 ms
12  xe-8-3-2.0.pjr02.nyc005.flagtel.com (85.95.26.41)  273.876 ms  273.968 ms  275.356 ms
13  * * *
14  52.93.4.103 (52.93.4.103)  246.706 ms  288.696 ms  288.885 ms
15  52.93.4.0 (52.93.4.0)  228.696 ms  308.415 ms  308.465 ms
16  * * *
17  54.240.229.149 (54.240.229.149)  285.075 ms  284.130 ms  241.088 ms
18  * * *
19  * * *
20  * * *
21  * * *
22  * * *
23  * * *
24  * * *
25  * * *
26  * * *
27  * * *
28  52.93.28.108 (52.93.28.108)  300.797 ms  300.909 ms  301.171 ms
29  * * *
30  * * *
arjun@arjun-XPS-13-9360:~$ █

```

```
arjun@arjun-XPS-13-9360:~$ sudo traceroute -I www.aip.org
traceroute to www.aip.org (34.225.67.115), 30 hops max, 60 byte packets
 1  10.22.43.254 (10.22.43.254)  2.240 ms  2.752 ms  3.295 ms
 2  10.25.100.1 (10.25.100.1)  1.204 ms  1.278 ms  1.912 ms
 3  10.26.0.14 (10.26.0.14)  1.583 ms  1.430 ms  1.316 ms
 4  10.119.232.138 (10.119.232.138)  1.900 ms  1.947 ms  1.957 ms
 5  10.119.232.137 (10.119.232.137)  3.103 ms  3.220 ms  3.664 ms
 6  10.163.255.201 (10.163.255.201)  3.735 ms  2.745 ms  3.143 ms
 7  10.119.73.122 (10.119.73.122)  3.226 ms  7.834 ms  7.819 ms
 8  115.248.104.230 (115.248.104.230)  3.274 ms  3.570 ms  3.729 ms
 9  * * *
10  * 62.216.147.73 (62.216.147.73)  207.015 ms  207.091 ms
11  xe-0-1-1.0.pjr03.ldn001.flagtel.com (85.95.26.233)  207.510 ms  205.175 ms  205.426 ms
12  xe-8-3-2.0.pjr02.nyc005.flagtel.com (85.95.26.41)  259.237 ms  258.985 ms  259.074 ms
13  * * *
14  52.93.4.103 (52.93.4.103)  225.655 ms  298.948 ms  299.088 ms
15  52.93.4.0 (52.93.4.0)  297.058 ms  297.315 ms  300.972 ms
16  * * *
17  54.240.229.143 (54.240.229.143)  244.632 ms  237.587 ms  237.355 ms
18  * * *
19  * * *
20  * * *
21  * * *
22  * * *
23  * * *
24  * * *
25  * * *
26  * * *
27  * * *
28  52.93.28.84 (52.93.28.84)  326.480 ms  326.556 ms  326.613 ms
29  * * *
30  * * *
arjun@arjun-XPS-13-9360:~$
```

- www.uq.edu.au

```
arjun@arjun-XPS-13-9360:~$ sudo traceroute -I www.uq.edu.au
traceroute to www.uq.edu.au (130.102.184.3), 30 hops max, 60 byte packets
 1  10.22.43.254 (10.22.43.254)  1.864 ms  2.410 ms  4.618 ms
 2  10.25.100.1 (10.25.100.1)  21.667 ms  21.726 ms  21.779 ms
 3  10.26.0.14 (10.26.0.14)  1.482 ms  1.450 ms  1.324 ms
 4  10.119.232.138 (10.119.232.138)  21.829 ms  21.938 ms  23.317 ms
 5  10.119.232.137 (10.119.232.137)  6.602 ms  6.662 ms  12.419 ms
 6  10.163.255.201 (10.163.255.201)  15.191 ms  13.770 ms  13.990 ms
 7  180.149.48.15 (180.149.48.15)  13.584 ms  4.871 ms  4.959 ms
 8  180.149.48.23 (180.149.48.23)  38.782 ms  38.933 ms  39.238 ms
 9  203.30.38.74 (203.30.38.74)  36.497 ms  37.214 ms  38.362 ms
10  203.30.38.97 (203.30.38.97)  39.337 ms  *  *
11  *  *  *
12  *  *  *
13  *  *  *
14  *  *  *
15  *  *  *
16  *  *  *
17  *  *  *
18  *  *  *
19  *  *  *
20  create-change.uq.edu.au (130.102.184.3)  313.145 ms  313.426 ms  409.015 ms
arjun@arjun-XPS-13-9360:~$
```

```
arjun@arjun-XPS-13-9360:~$ sudo traceroute -I uq.edu.au
traceroute to uq.edu.au (130.102.184.3), 30 hops max, 60 byte packets
 1  10.22.43.254 (10.22.43.254)  2.756 ms  2.857 ms  3.509 ms
 2  10.25.100.1 (10.25.100.1)  1.843 ms  1.919 ms  1.991 ms
 3  10.26.0.14 (10.26.0.14)  2.221 ms  2.143 ms  2.019 ms
 4  10.119.232.138 (10.119.232.138)  2.298 ms  2.380 ms  2.491 ms
 5  10.119.232.137 (10.119.232.137)  3.815 ms  3.926 ms  4.165 ms
 6  10.163.255.201 (10.163.255.201)  5.013 ms  3.048 ms  3.282 ms
 7  180.149.48.15 (180.149.48.15)  2.079 ms  2.232 ms  2.446 ms
 8  180.149.48.23 (180.149.48.23)  35.035 ms  35.511 ms  36.471 ms
 9  203.30.38.74 (203.30.38.74)  34.893 ms  35.380 ms  35.548 ms
10  203.30.38.97 (203.30.38.97)  37.018 ms  37.018 ms  *
11  *  *  *
12  *  *  *
13  *  *  *
14  *  *  *
15  *  *  *
16  *  *  *
17  *  *  *
18  *  *  *
19  *  *  *
20  createhistory.law.uq.edu.au (130.102.184.3)  409.418 ms  409.626 ms  406.476 ms
arjun@arjun-XPS-13-9360:~$
```

```
arjun@arjun-XPS-13-9360:~$ sudo traceroute -I uq.edu.au
traceroute to uq.edu.au (130.102.184.3), 30 hops max, 60 byte packets
 1  10.22.43.254 (10.22.43.254)  2.387 ms  2.544 ms  2.846 ms
 2  10.25.100.1 (10.25.100.1)  11.620 ms  11.722 ms  11.737 ms
 3  10.26.0.14 (10.26.0.14)  2.168 ms  1.476 ms  1.385 ms
 4  10.119.232.138 (10.119.232.138)  11.752 ms  11.861 ms  11.947 ms
 5  10.119.232.137 (10.119.232.137)  3.005 ms  3.390 ms  3.466 ms
 6  10.163.255.201 (10.163.255.201)  4.380 ms  3.169 ms  4.983 ms
 7  180.149.48.15 (180.149.48.15)  4.221 ms  2.004 ms  2.060 ms
 8  180.149.48.23 (180.149.48.23)  37.937 ms  38.372 ms  38.647 ms
 9  203.30.38.74 (203.30.38.74)  34.421 ms  37.700 ms  37.972 ms
10  203.30.38.97 (203.30.38.97)  38.857 ms  *  *
11  *  *  *
12  *  *  *
13  *  *  *
14  *  *  *
15  *  *  *
16  *  *  *
17  *  *  *
18  *  *  *
19  *  *  *
20  www.uqhealthyliving.com.au (130.102.184.3)  308.242 ms  310.681 ms  409.139 ms
arjun@arjun-XPS-13-9360:~$
```