

Лабораторная работа №1, частка 1

Асновы дыягностыкі сеткі кансольнымі сродкамі аперацыйнай сістэмы

Варыянт 3

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ФПМІ, 3 курс, 3 група

The source code of script which generated the pdf is on my github:

https://github.com/UladBohdan/uni-code/tree/master/6-networks/lab_1_1

1 hostname util

UladBohdan.local

2 ipconfig

IP-address

10.160.22.178

Subnet mask

255.255.128.0

Gateway

gateway: open.wifi.bsu

DHCP address

10.0.0.20

Mac address

ether 4a:00:07:79:e6:90

DNS server

10.0.0.20

3 ping

10.150.1.5

PING 10.150.1.5 (10.150.1.5): 56 data bytes

64 bytes from 10.150.1.5: icmp_seq=0 ttl=254 time=4.491 ms

64 bytes from 10.150.1.5: icmp_seq=1 ttl=254 time=2.005 ms

64 bytes from 10.150.1.5: icmp_seq=2 ttl=254 time=3.918 ms

64 bytes from 10.150.1.5: icmp_seq=3 ttl=254 time=2.050 ms

--- 10.150.1.5 ping statistics ---

4 packets transmitted, 4 packets received, 0.0% packet loss

round-trip min/avg/max/stddev = 2.005/3.116/4.491/1.107 ms

10.150.1.1

```
PING 10.150.1.1 (10.150.1.1): 56 data bytes
64 bytes from 10.150.1.1: icmp_seq=0 ttl=126 time=1.061 ms
64 bytes from 10.150.1.1: icmp_seq=1 ttl=126 time=3.146 ms
64 bytes from 10.150.1.1: icmp_seq=2 ttl=126 time=1.115 ms
64 bytes from 10.150.1.1: icmp_seq=3 ttl=126 time=9.102 ms

--- 10.150.1.1 ping statistics ---
4 packets transmitted, 4 packets received, 0.0% packet loss
round-trip min/avg/max/stddev = 1.061/3.606/9.102/3.283 ms
```

10.0.0.20

```
PING 10.0.0.20 (10.0.0.20): 56 data bytes
64 bytes from 10.0.0.20: icmp_seq=0 ttl=127 time=1.210 ms
64 bytes from 10.0.0.20: icmp_seq=1 ttl=127 time=1.143 ms
64 bytes from 10.0.0.20: icmp_seq=2 ttl=127 time=4.869 ms
64 bytes from 10.0.0.20: icmp_seq=3 ttl=127 time=1.130 ms

--- 10.0.0.20 ping statistics ---
4 packets transmitted, 4 packets received, 0.0% packet loss
round-trip min/avg/max/stddev = 1.130/2.088/4.869/1.606 ms
```

10.150.6.29

```
PING 10.150.6.29 (10.150.6.29): 56 data bytes
64 bytes from 10.150.6.29: icmp_seq=0 ttl=126 time=1.291 ms
64 bytes from 10.150.6.29: icmp_seq=1 ttl=126 time=315.514 ms
Request timeout for icmp_seq 2
64 bytes from 10.150.6.29: icmp_seq=2 ttl=126 time=1039.857 ms
64 bytes from 10.150.6.29: icmp_seq=3 ttl=126 time=38.830 ms

--- 10.150.6.29 ping statistics ---
4 packets transmitted, 4 packets received, 0.0% packet loss
round-trip min/avg/max/stddev = 1.291/348.873/1039.857/416.987 ms
```

10.150.3.30

```
PING 10.150.3.30 (10.150.3.30): 56 data bytes
Request timeout for icmp_seq 0
Request timeout for icmp_seq 1
Request timeout for icmp_seq 2

--- 10.150.3.30 ping statistics ---
4 packets transmitted, 0 packets received, 100.0% packet loss
```

google.com.by

```
PING google.com.by (172.217.22.4): 1000 data bytes
72 bytes from 172.217.22.4: icmp_seq=0 ttl=53 time=39.885 ms
wrong total length 92 instead of 1028
72 bytes from 172.217.22.4: icmp_seq=1 ttl=53 time=40.695 ms
wrong total length 92 instead of 1028
72 bytes from 172.217.22.4: icmp_seq=2 ttl=53 time=39.184 ms
wrong total length 92 instead of 1028

--- google.com.by ping statistics ---
3 packets transmitted, 3 packets received, 0.0% packet loss
round-trip min/avg/max/stddev = 39.184/39.921/40.695/0.617 ms
```

velcom.by

```
PING velcom.by (178.163.161.242): 1000 data bytes
Request timeout for icmp_seq 0
Request timeout for icmp_seq 1
```

```
--- velcom.by ping statistics ---
```

```
3 packets transmitted, 0 packets received, 100.0% packet loss
```

localhost

```
PING localhost.eduroam.bsu (10.160.8.64): 56 data bytes
Request timeout for icmp_seq 0
Request timeout for icmp_seq 1
Request timeout for icmp_seq 2
Request timeout for icmp_seq 3
```

```
--- localhost.eduroam.bsu ping statistics ---
```

```
5 packets transmitted, 0 packets received, 100.0% packet loss
```

4 traceroute

traceroute google.com.by

```
1  open.wifi.bsu (10.160.0.1)  7.248 ms  1.997 ms  2.032 ms
2  * border-gw.net.bsu (10.149.8.252)  2.505 ms  3.537 ms
3  * * *
4  * * *
5  * * rlu-sl6.basnet.by (80.94.160.110)  391.218 ms
6  * basnet-ias-geant-gw.poz.pl.geant.net (83.97.88.17)  16.128 ms  15.906 ms
7  * google.mx1.fra.de.geant.net (62.40.125.201)  52.834 ms  39.433 ms
8  * google-gw.mx1.fra.de.geant.net (62.40.125.202)  47.593 ms  56.885 ms
9  * * 209.85.242.91 (209.85.242.91)  2002.570 ms
10 * * 108.170.235.253 (108.170.235.253)  46.036 ms
11 * fra16s14-in-f4.1e100.net (172.217.22.4)  39.922 ms  37.934 ms
```

traceroute -m 7 velcom.by

```
1  open.wifi.bsu (10.160.0.1)  1.341 ms  1.787 ms  9.235 ms
2  border-gw.net.bsu (10.149.8.252)  0.993 ms  1.165 ms  0.969 ms
3  * * *
4  * r1c-zah-te3-2.basnet.by (80.94.160.81)  277.532 ms  1.818 ms
5  * as42772.by-ix.net (195.137.180.27)  3.020 ms  3.665 ms
6  * * *
7  * * *
```

5 arp

arp -a

```
? (10.37.129.255) at (incomplete) on vnic1 ifscope [ethernet]
open.wifi.bsu (10.160.0.1) at 0:21:a0:c1:19:40 on en0 ifscope [ethernet]
? (10.160.8.64) at (incomplete) on en0 ifscope [ethernet]
? (10.160.127.255) at (incomplete) on en0 ifscope [ethernet]
? (10.211.55.255) at (incomplete) on vnic0 ifscope [ethernet]
? (224.0.0.251) at 1:0:5e:0:0:fb on en0 ifscope permanent [ethernet]
? (239.255.255.250) at 1:0:5e:7f:ff:fa on en0 ifscope permanent [ethernet]
broadcasthost (255.255.255.255) at (incomplete) on en0 ifscope [ethernet]
```

6 netstat

netstat -p TCP

Active Internet connections

| Proto | Recv-Q | Send-Q | Local Address | Foreign Address | (state) |
|-------|--------|--------|------------------------|------------------------|-------------|
| tcp4 | 0 | 0 | 10.160.22.178.55464 | fra16s20-in-f3.1.https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55462 | fra16s14-in-f1.1.https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55460 | 109.105.109.8.http | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55456 | bud02s22-in-f10..https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55455 | waw02s08-in-f200.https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55453 | bud02s22-in-f10..https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55451 | waw02s06-in-f78..https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55440 | 192.30.253.124.https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55429 | waw02s06-in-f78..https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55428 | 151.101.36.133.https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55420 | waw02s06-in-f78..https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55407 | 151.101.36.102.https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55400 | 151.101.36.84.https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55390 | 95.213.11.180.https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55386 | waw02s06-in-f78..https | ESTABLISHED |
| tcp4 | 31 | 0 | 10.160.22.178.55367 | 162.125.66.3.https | CLOSE_WAIT |
| tcp4 | 0 | 0 | 10.160.22.178.55363 | waw02s06-in-f77..https | CLOSE_WAIT |
| tcp4 | 0 | 0 | 10.160.22.178.55362 | bud02s21-in-f170.https | CLOSE_WAIT |
| tcp4 | 0 | 0 | 10.160.22.178.55333 | ec2-52-44-152-64.https | CLOSE_WAIT |
| tcp4 | 0 | 0 | 10.160.22.178.55332 | 95.213.4.196.https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55324 | 192.30.253.124.https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55262 | lastfm-api-vip1..http | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55259 | fra16s14-in-f3.1.https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55201 | 192.30.253.124.https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55164 | waw02s06-in-f78..https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54797 | lastfm-api-vip1..http | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54790 | 149.154.167.51.https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54718 | 95.213.4.217.https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54701 | ec2-54-242-116-2.https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54695 | 17.188.166.13.5223 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54694 | lt-in-f125.1e100.jabbe | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54693 | lt-in-f125.1e100.jabbe | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54692 | 162.125.18.133.https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54677 | lo-in-f188.1e100.https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54676 | 17.188.139.158.5223 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54674 | lt-in-f125.1e100.jabbe | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54669 | lt-in-f189.1e100.https | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54300 | lt-in-f125.1e100.jabbe | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.53207 | lt-in-f125.1e100.jabbe | ESTABLISHED |
| tcp4 | 0 | 0 | cit-aheichyk.bsu.52332 | wl-in-f125.1e100.jabbe | ESTABLISHED |
| tcp4 | 31 | 0 | cit-aheichyk.bsu.50414 | 108.160.173.1.https | CLOSE_WAIT |
| tcp4 | 31 | 0 | cit-aheichyk.bsu.50413 | 108.160.173.1.https | CLOSE_WAIT |
| tcp4 | 0 | 0 | cit-aheichyk.bsu.64564 | fra16s12-in-f202.https | CLOSE_WAIT |
| tcp4 | 0 | 0 | cit-aheichyk.bsu.64551 | fra16s13-in-f13..https | CLOSE_WAIT |
| tcp4 | 0 | 0 | cit-aheichyk.bsu.64549 | fra16s12-in-f202.https | CLOSE_WAIT |
| tcp4 | 0 | 0 | cit-aheichyk.bsu.64531 | wl-in-f125.1e100.jabbe | ESTABLISHED |
| tcp4 | 0 | 0 | 192.168.43.115.64067 | lr-in-f125.1e100.jabbe | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.62395 | lf-in-f125.1e100.jabbe | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.62394 | lf-in-f125.1e100.jabbe | ESTABLISHED |
| tcp4 | 0 | 0 | cit-michael.bsu.54938 | wl-in-f125.1e100.jabbe | ESTABLISHED |
| tcp4 | 0 | 0 | cit-michael.bsu.54273 | wl-in-f125.1e100.jabbe | ESTABLISHED |
| tcp4 | 0 | 0 | cit-michael.bsu.54251 | wl-in-f125.1e100.jabbe | ESTABLISHED |
| tcp4 | 0 | 0 | cit-michael.bsu.54245 | wl-in-f125.1e100.jabbe | ESTABLISHED |
| tcp4 | 0 | 0 | 192.168.1.114.65491 | fra16s12-in-f1.1.https | CLOSE_WAIT |
| tcp4 | 0 | 0 | 192.168.1.114.65490 | fra16s12-in-f1.1.https | CLOSE_WAIT |

| | | | | | |
|------|----|---|---------------------|------------------------|------------|
| tcp4 | 0 | 0 | 192.168.1.114.65489 | fra16s12-in-f1.1.https | CLOSE_WAIT |
| tcp4 | 0 | 0 | 192.168.1.114.65486 | fra16s20-in-f10..https | CLOSE_WAIT |
| tcp4 | 31 | 0 | 192.168.1.112.49550 | client.v.dropbox.https | CLOSE_WAIT |
| tcp4 | 0 | 0 | 10.160.22.178.55413 | waw02s07-in-f162.https | TIME_WAIT |
| tcp4 | 0 | 0 | 10.160.22.178.55409 | waw02s06-in-f6.1.https | TIME_WAIT |
| tcp4 | 0 | 0 | 10.160.22.178.55415 | waw02s05-in-f2.1.https | TIME_WAIT |
| tcp4 | 0 | 0 | 10.160.22.178.55448 | fra16s14-in-f3.1.https | TIME_WAIT |
| tcp4 | 0 | 0 | 10.160.22.178.55449 | 104.237.191.1.https | TIME_WAIT |

netstat -np TCP

Active Internet connections

| Proto | Recv-Q | Send-Q | Local Address | Foreign Address | (state) |
|-------|--------|--------|----------------------|---------------------|-------------|
| tcp4 | 0 | 0 | 10.160.22.178.55464 | 216.58.206.3.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55462 | 172.217.22.1.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55460 | 109.105.109.8.80 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55456 | 216.58.209.202.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55455 | 172.217.20.200.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55453 | 216.58.209.202.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55451 | 216.58.209.78.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55440 | 192.30.253.124.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55429 | 216.58.209.78.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55428 | 151.101.36.133.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55420 | 216.58.209.78.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55407 | 151.101.36.102.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55400 | 151.101.36.84.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55390 | 95.213.11.180.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55386 | 216.58.209.78.443 | ESTABLISHED |
| tcp4 | 31 | 0 | 10.160.22.178.55367 | 162.125.66.3.443 | CLOSE_WAIT |
| tcp4 | 0 | 0 | 10.160.22.178.55363 | 216.58.209.77.443 | CLOSE_WAIT |
| tcp4 | 0 | 0 | 10.160.22.178.55362 | 216.58.209.170.443 | CLOSE_WAIT |
| tcp4 | 0 | 0 | 10.160.22.178.55333 | 52.44.152.64.443 | CLOSE_WAIT |
| tcp4 | 0 | 0 | 10.160.22.178.55332 | 95.213.4.196.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55324 | 192.30.253.124.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55262 | 64.30.224.206.80 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55259 | 172.217.22.3.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55201 | 192.30.253.124.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.55164 | 216.58.209.78.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54797 | 64.30.224.206.80 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54790 | 149.154.167.51.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54718 | 95.213.4.217.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54701 | 54.242.116.253.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54695 | 17.188.166.13.5223 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54694 | 108.177.14.125.5222 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54693 | 108.177.14.125.5222 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54692 | 162.125.18.133.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54677 | 173.194.222.188.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54676 | 17.188.139.158.5223 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54674 | 108.177.14.125.5222 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54669 | 108.177.14.189.443 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.54300 | 108.177.14.125.5222 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.53207 | 108.177.14.125.5222 | ESTABLISHED |
| tcp4 | 0 | 0 | 192.168.0.101.52332 | 64.233.167.125.5222 | ESTABLISHED |
| tcp4 | 31 | 0 | 192.168.0.101.50414 | 108.160.173.1.443 | CLOSE_WAIT |
| tcp4 | 31 | 0 | 192.168.0.101.50413 | 108.160.173.1.443 | CLOSE_WAIT |
| tcp4 | 0 | 0 | 192.168.0.101.64564 | 172.217.21.202.443 | CLOSE_WAIT |
| tcp4 | 0 | 0 | 192.168.0.101.64551 | 172.217.21.237.443 | CLOSE_WAIT |
| tcp4 | 0 | 0 | 192.168.0.101.64549 | 172.217.21.202.443 | CLOSE_WAIT |
| tcp4 | 0 | 0 | 192.168.0.101.64531 | 64.233.167.125.5222 | ESTABLISHED |
| tcp4 | 0 | 0 | 192.168.43.115.64067 | 209.85.233.125.5222 | ESTABLISHED |
| tcp4 | 0 | 0 | 10.160.22.178.62395 | 64.233.164.125.5222 | ESTABLISHED |

| | | | | | |
|------|----|---|---------------------|---------------------|-------------|
| tcp4 | 0 | 0 | 10.160.22.178.62394 | 64.233.164.125.5222 | ESTABLISHED |
| tcp4 | 0 | 0 | 192.168.0.100.54938 | 64.233.167.125.5222 | ESTABLISHED |
| tcp4 | 0 | 0 | 192.168.0.100.54273 | 64.233.167.125.5222 | ESTABLISHED |
| tcp4 | 0 | 0 | 192.168.0.100.54251 | 64.233.167.125.5222 | ESTABLISHED |
| tcp4 | 0 | 0 | 192.168.0.100.54245 | 64.233.167.125.5222 | ESTABLISHED |
| tcp4 | 0 | 0 | 192.168.1.114.65491 | 172.217.21.193.443 | CLOSE_WAIT |
| tcp4 | 0 | 0 | 192.168.1.114.65490 | 172.217.21.193.443 | CLOSE_WAIT |
| tcp4 | 0 | 0 | 192.168.1.114.65489 | 172.217.21.193.443 | CLOSE_WAIT |
| tcp4 | 0 | 0 | 192.168.1.114.65486 | 216.58.206.10.443 | CLOSE_WAIT |
| tcp4 | 31 | 0 | 192.168.1.112.49550 | 108.160.172.204.443 | CLOSE_WAIT |
| tcp4 | 0 | 0 | 10.160.22.178.55413 | 172.217.20.162.443 | TIME_WAIT |
| tcp4 | 0 | 0 | 10.160.22.178.55409 | 216.58.209.70.443 | TIME_WAIT |
| tcp4 | 0 | 0 | 10.160.22.178.55415 | 216.58.209.34.443 | TIME_WAIT |
| tcp4 | 0 | 0 | 10.160.22.178.55448 | 172.217.22.3.443 | TIME_WAIT |
| tcp4 | 0 | 0 | 10.160.22.178.55449 | 104.237.191.1.443 | TIME_WAIT |

netstat -a -s -r

```

routing:
0 bad routing redirect
0 dynamically created route
0 new gateway due to redirects
4294962505 destination found unreachable
0 use of a wildcard route
25 routes not in table but not freed

```

Flag description:

-a, -all - Show both listening and non-listening (for TCP this means established connections) sockets.
-s, -statistics - Display summary statistics for each protocol.
-r, -route - Display the kernel routing tables.

7 nslookup

nslookup 10.150.5.44

```

Server: 10.0.0.20
Address: 10.0.0.20#53

```

```
44.5.150.10.in-addr.arpa name = fpni506st14.bsu.
```

8 route table

netstat -rn

Routing tables

```

Internet:
Destination      Gateway          Flags           Refs      Use     Netif  Expire
default          10.160.0.1      UGSc            202       169      en0
10.37.129/24     link#13         UC              3         0       vnic1
10.37.129.255    link#13         UHLWbI          1        140      vnic1
10.160/17        link#4          UCS             3         0       en0
10.160.0.1/32    link#4          UCS             2         0       en0
10.160.0.1       0:21:a0:c1:19:40 UHLWIir        203        16      en0    1178
10.160.8.64      link#4          UHLWIi          1         30      en0
10.160.22.178/32 link#4          UCS             1         0       en0
10.160.127.255   link#4          UHLWbI          1        140      en0
10.211.55/24     link#12         UC              3         0       vnic0
10.211.55.255    link#12         UHLWbI          1        140      vnic0

```

| | | | | | |
|--------------------|-----------------|--------|---|---------|-----|
| 127 | 127.0.0.1 | UCS | 1 | 0 | lo0 |
| 127.0.0.1 | 127.0.0.1 | UH | 3 | 1092435 | lo0 |
| 224.0.0/4 | link#4 | UmCS | 3 | 0 | en0 |
| 224.0.0.251 | 1:0:5e:0:0:fb | UHmLWI | 1 | 0 | en0 |
| 239.255.255.250 | 1:0:5e:7f:ff:fa | UHmLWI | 1 | 172 | en0 |
| 255.255.255.255/32 | link#4 | UCS | 2 | 0 | en0 |
| 255.255.255.255 | link#4 | UHLWbI | 1 | 120 | en0 |

Internet6:

| Destination | Gateway | Flags | Netif | Expire |
|---------------------------------|---------------------------------|-------|-------|--------|
| default | fe80::%utun0 | UGcI | utun0 | |
| ::1 | ::1 | UHL | lo0 | |
| fe80::%lo0/64 | fe80::1%lo0 | UcI | lo0 | |
| fe80::1%lo0 | link#1 | UHLI | lo0 | |
| fe80::%en0/64 | link#4 | UCI | en0 | |
| fe80::8ae:1e54:b729:f922%en0 | c4:b3:1:cd:f5:5f | UHLI | lo0 | |
| fe80::%awdl0/64 | link#9 | UCI | awdl0 | |
| fe80::486:8eff:fe75:49f9%awdl0 | 6:86:8e:75:49:f9 | UHLI | lo0 | |
| fe80::%utun0/64 | fe80::4fb2:730a:8fbb:7b33%utun0 | UcI | utun0 | |
| fe80::4fb2:730a:8fbb:7b33%utun0 | link#10 | UHLI | lo0 | |
| ff01::%lo0/32 | ::1 | UmCI | lo0 | |
| ff01::%en0/32 | link#4 | UmCI | en0 | |
| ff01::%awdl0/32 | link#9 | UmCI | awdl0 | |
| ff01::%utun0/32 | fe80::4fb2:730a:8fbb:7b33%utun0 | UmCI | utun0 | |
| ff02::%lo0/32 | ::1 | UmCI | lo0 | |
| ff02::%en0/32 | link#4 | UmCI | en0 | |
| ff02::%awdl0/32 | link#9 | UmCI | awdl0 | |
| ff02::%utun0/32 | fe80::4fb2:730a:8fbb:7b33%utun0 | UmCI | utun0 | |