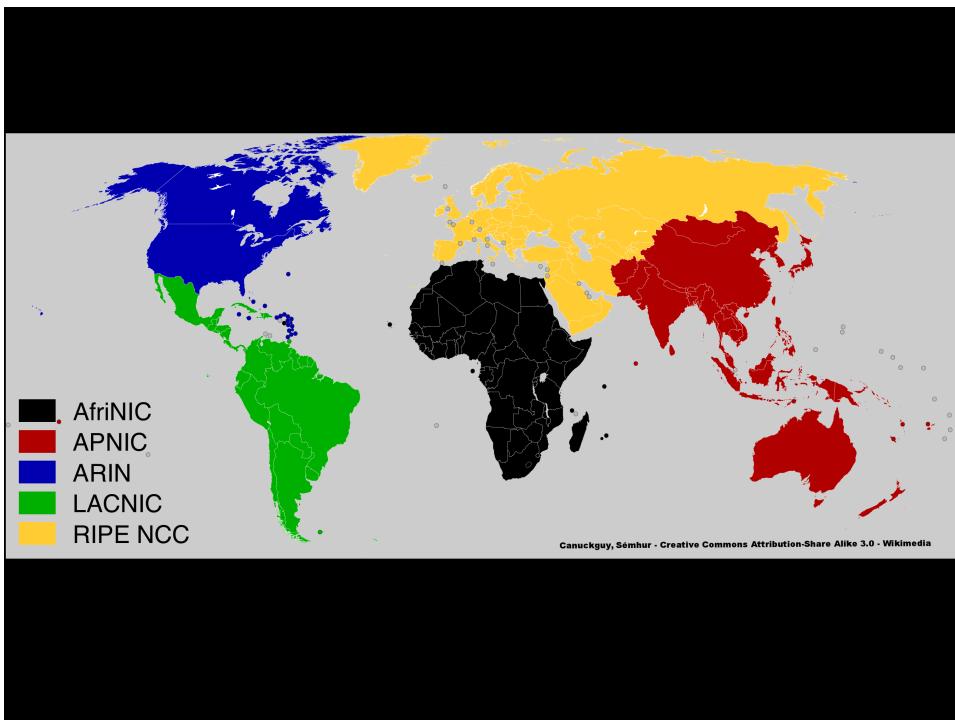
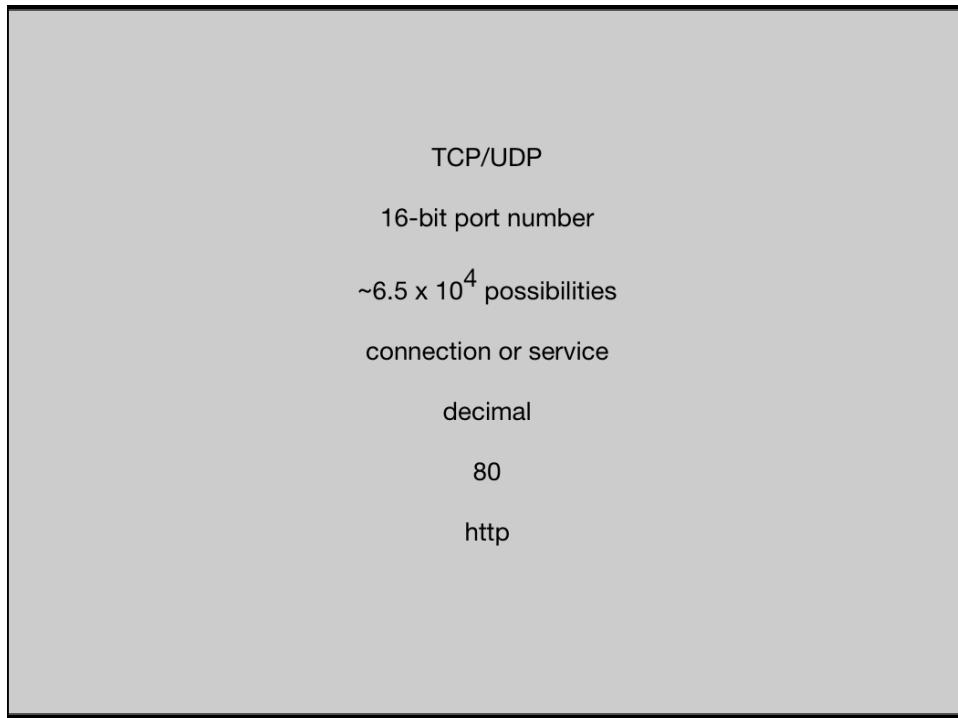
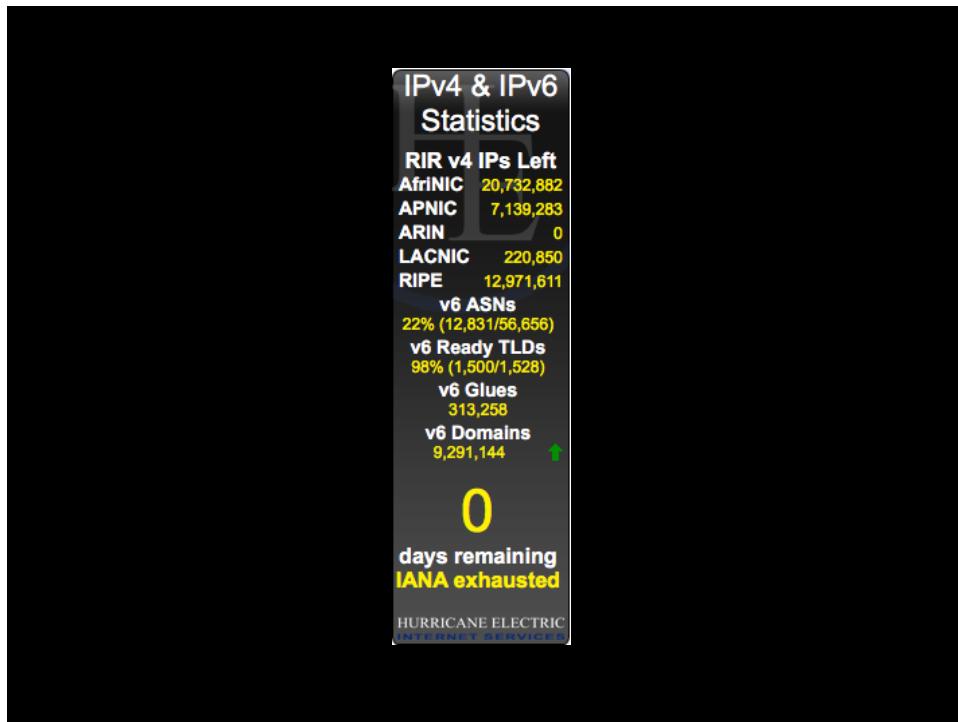


IPv4  
1974 - 1983  
32-bit address  
 $\sim 4.2 \times 10^9$  possibilities  
network + subnetwork + host  
4 octets in decimal separated by periods  
100.125.125.255  
DNS record type A





IPv6

1995 - 2005

128-bit address

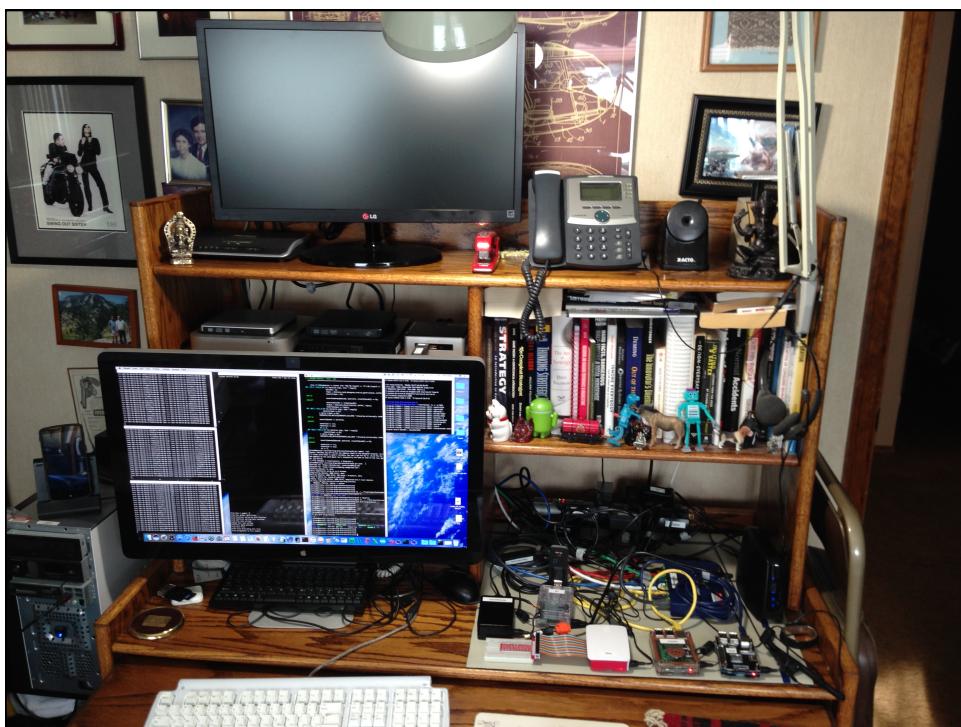
$\sim 3.4 \times 10^{38}$  possibilities

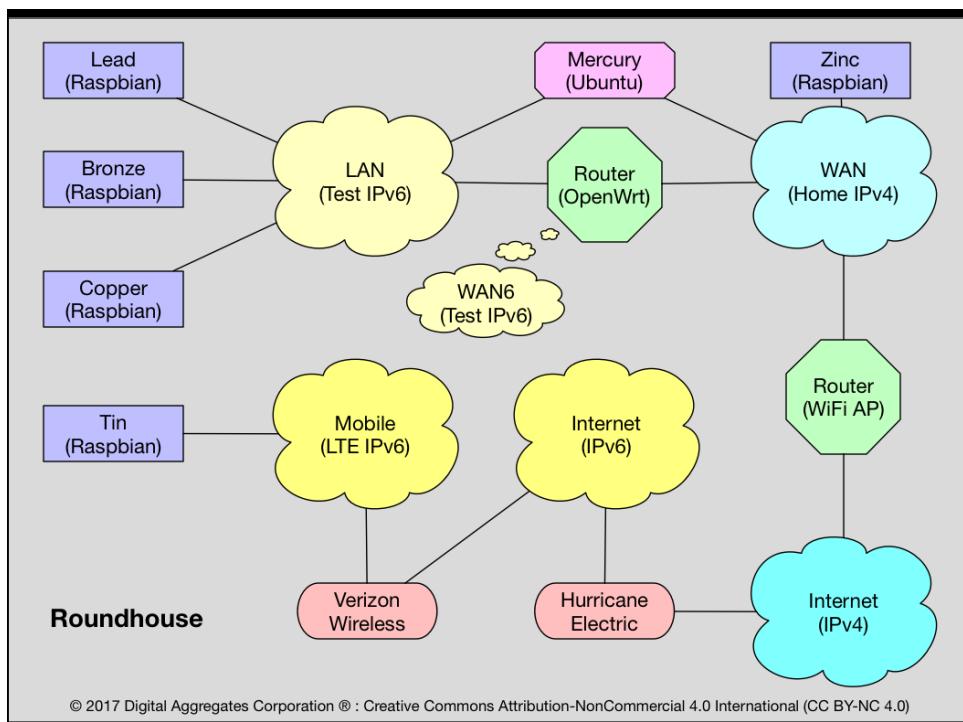
prefix (48 bits) + subnetwork (16 bits) + interface (64 bits)

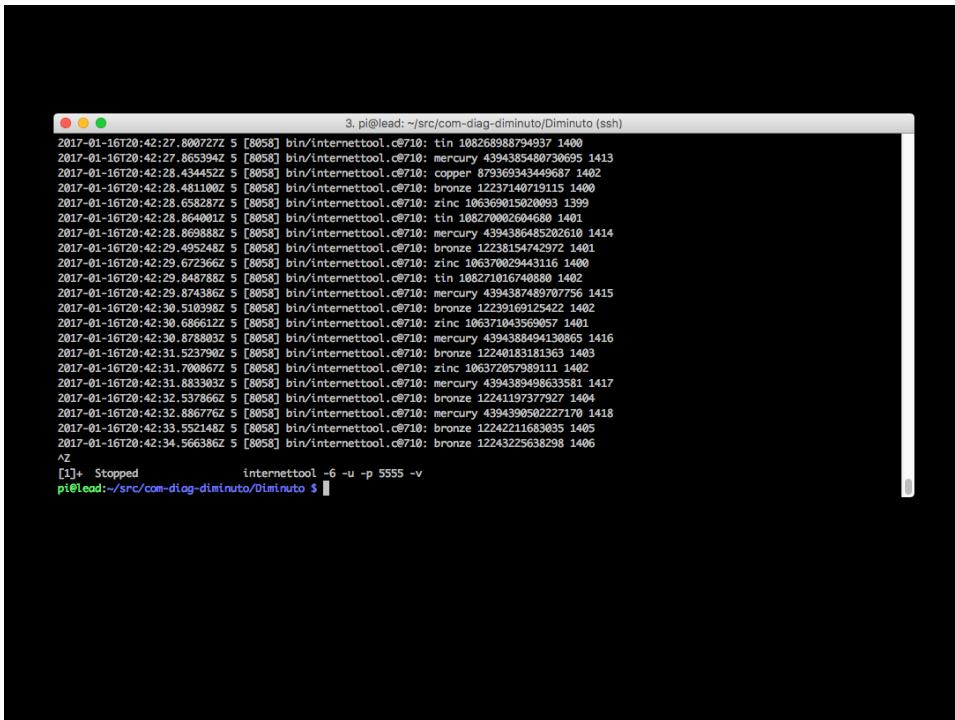
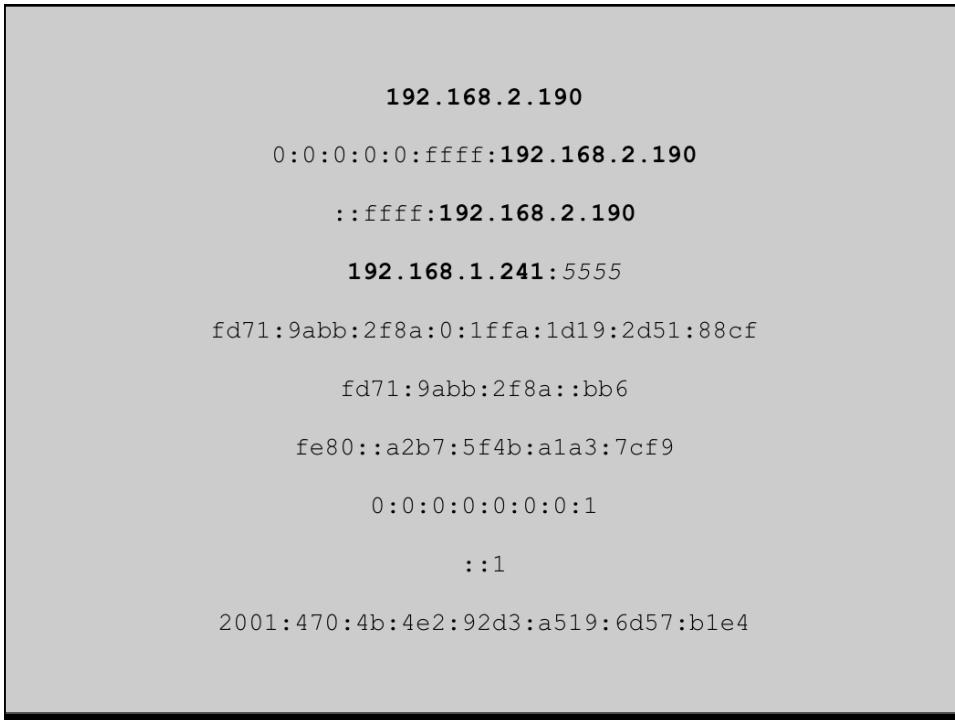
8 hexets in hexadecimal separated by colons

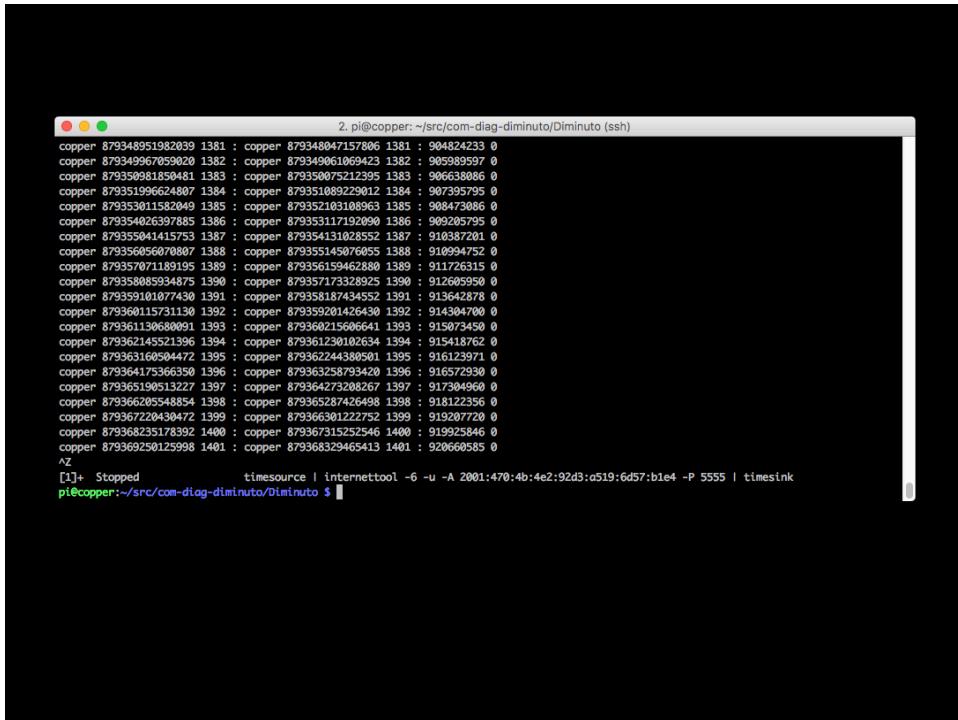
2600:100e:b003:f288:c265:6cae:85c8:4f68

DNS record type AAAA





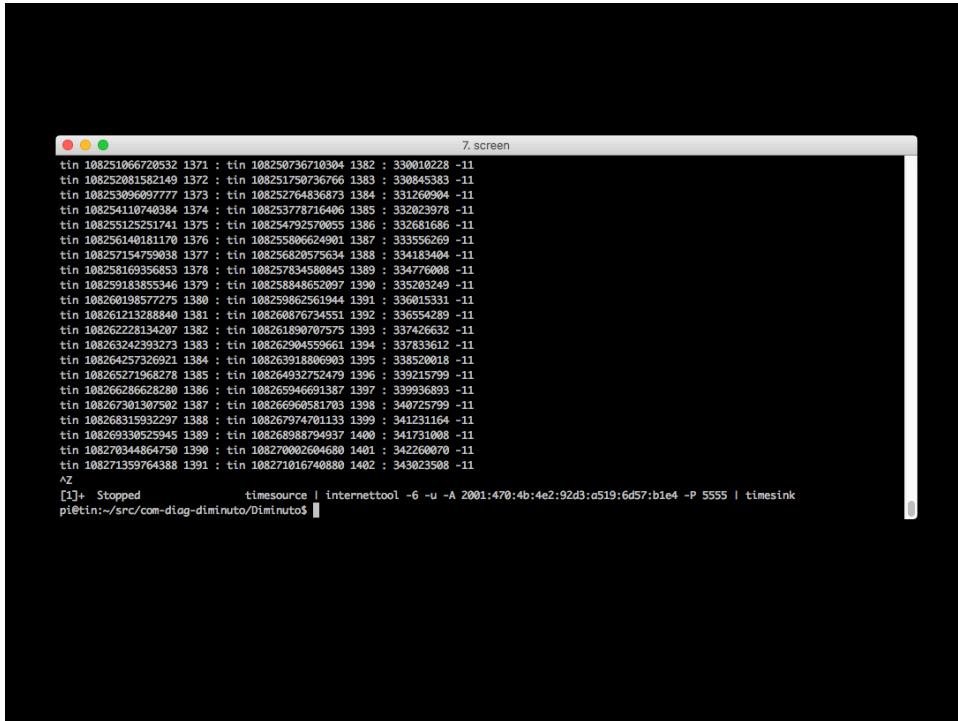




```

pi@copper: ~src/com-diag-diminuto/Diminuto (ssh)
copper 879348951982039 1381 : copper 879348951982039 1381 : 904824233 0
copper 879349967059020 1382 : copper 879349967059020 1382 : 905989597 0
copper 87935001850481 1383 : copper 87935001850481 1383 : 906638086 0
copper 879351996624807 1384 : copper 879351996624807 1384 : 907395795 0
copper 879353011582049 1385 : copper 879353011582049 1385 : 908473686 0
copper 879354026397881 1386 : copper 879354026397881 1386 : 909205795 0
copper 879355041415753 1387 : copper 879355041415753 1387 : 91037201 0
copper 8793557071189195 1389 : copper 8793557071189195 1389 : 911726315 0
copper 87935808534875 1390 : copper 87935808534875 1390 : 912609590 0
copper 879359101077430 1391 : copper 879359101077430 1391 : 913642878 0
copper 879360115731130 1392 : copper 879360115731130 1392 : 914364700 0
copper 879361130688091 1393 : copper 879361130688091 1393 : 915073458 0
copper 879362145521396 1394 : copper 879362145521396 1394 : 915418762 0
copper 879363160504472 1395 : copper 879363160504472 1395 : 916123971 0
copper 879364173266350 1396 : copper 879364173266350 1396 : 916572930 0
copper 879365190513227 1397 : copper 879365190513227 1397 : 917304960 0
copper 879366205548854 1398 : copper 879366205548854 1398 : 918122356 0
copper 879367220430472 1399 : copper 879367220430472 1399 : 919267720 0
copper 879368235178392 1400 : copper 879368235178392 1400 : 919925846 0
copper 879369250125998 1401 : copper 879369250125998 1401 : 920660085 0
^Z
[1]+ Stopped timesource | internettool -6 -u -A 2001:470:4b:4e2:92d3:a519:6d57:b1e4 -P 5555 | timesink
pi@copper: ~src/com-diag-diminuto/Diminuto$ 

```



```

7. screen
tin 108251066720532 1371 : tin 108250736710304 1382 : 330010228 -11
tin 108252081582149 1372 : tin 108251750736766 1383 : 33045383 11
tin 1082530996097777 1373 : tin 108252764836873 1384 : 331269094 -11
tin 108254110740384 1374 : tin 108253778716406 1385 : 332023978 -11
tin 108255125251741 1375 : tin 108254792570055 1386 : 332681686 -11
tin 108256140181178 1376 : tin 1082558066249001 1387 : 333556269 -11
tin 108257154759038 1377 : tin 108256820575634 1388 : 334183404 -11
tin 108258169356831 1378 : tin 108257834580845 1389 : 334776008 -11
tin 108259183855346 1379 : tin 10825884652697 1390 : 335203249 -11
tin 108260198577275 1380 : tin 108259862561944 1391 : 336015331 -11
tin 1082612132528840 1381 : tin 108260876734551 1392 : 33654289 -11
tin 1082622228134207 1382 : tin 108261890707575 1393 : 337426632 -11
tin 108263242393273 1383 : tin 108262304559661 1394 : 337833612 -11
tin 108264257326921 1384 : tin 108263918886903 1395 : 338520018 -11
tin 108265271968278 1385 : tin 108264932752479 1396 : 339215799 -11
tin 108266286628280 1386 : tin 108265946691387 1397 : 339936893 -11
tin 108267301307502 1387 : tin 108266960581703 1398 : 340725799 -11
tin 108268315932297 1388 : tin 108267974701133 1399 : 341231161 -11
tin 108269330525945 1389 : tin 108268988734937 1400 : 341731008 -11
tin 108270344864750 1390 : tin 108270002694680 1401 : 342260070 -11
tin 108271359764388 1391 : tin 108271016740888 1402 : 343023588 -11
^Z
[1]+ Stopped timesource | internettool -6 -u -A 2001:470:4b:4e2:92d3:a519:6d57:b1e4 -P 5555 | timesink
pi@tin: ~src/com-diag-diminuto/Diminuto$ 

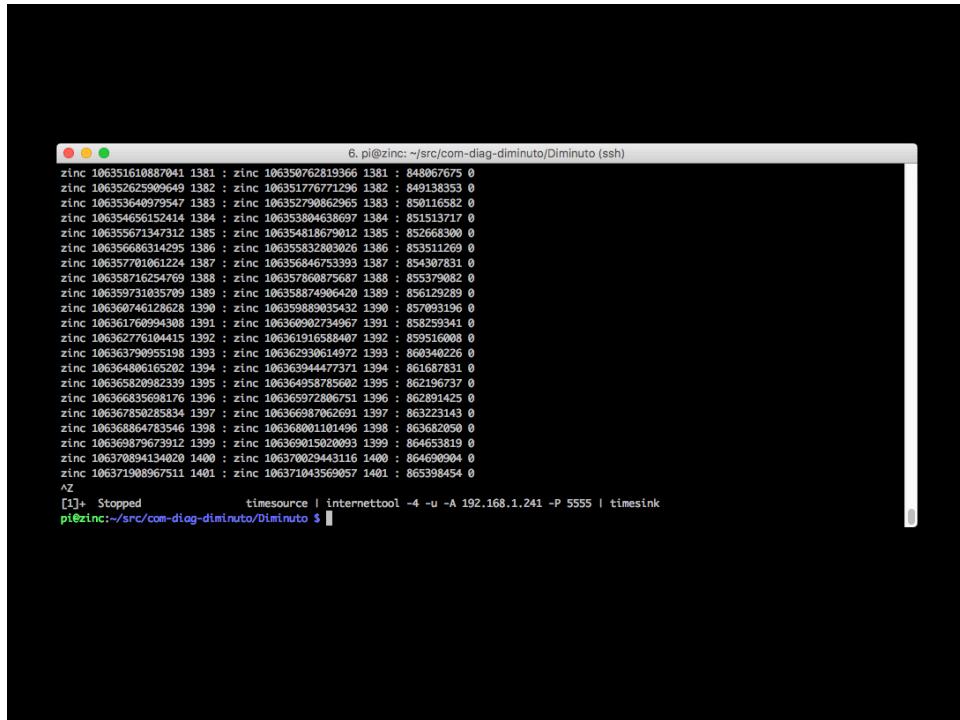
```

```

8. jsloan@mercury: ~/src/com-diag-diminuto/Diminuto (ssh)
mercury 4394371433810804 1398 : mercury 4394371421869915 1398 : 11955922 0
mercury 4394371433810804 1399 : mercury 4394371421869915 1399 : 11940889 0
mercury 439437243744157 1400 : mercury 4394372425563429 1400 : 11880728 0
mercury 4394373441177083 1401 : mercury 4394373429668234 1401 : 11508849 0
mercury 4394374445274052 1402 : mercury 4394374433943114 1402 : 11330918 0
mercury 4394375449130789 1403 : mercury 4394375438682173 1403 : 11048616 0
mercury 4394376453019331 1404 : mercury 4394376442245673 1404 : 10773658 0
mercury 4394377457132538 1405 : mercury 4394377446562097 1405 : 10570441 0
mercury 4394378461556453 1406 : mercury 4394378451000357 1406 : 10556096 0
mercury 4394379466070238 1407 : mercury 4394379455475713 1407 : 10594525 0
mercury 4394380470154926 1408 : mercury 4394380459413502 1408 : 10741424 0
mercury 4394381474273487 1409 : mercury 4394381463514504 1409 : 10758983 0
mercury 4394382478853848 1410 : mercury 4394382468005586 1410 : 10848262 0
mercury 4394383483216019 1411 : mercury 4394383472473737 1411 : 10743182 0
mercury 4394384487618543 1412 : mercury 4394384476587823 1412 : 11030715 0
mercury 4394385402607832 1413 : mercury 4394385408730695 1413 : 11277137 0
mercury 4394386496362033 1414 : mercury 4394386495202610 1414 : 11159423 0
mercury 4394387500668479 1415 : mercury 439438749707756 1415 : 10960723 0
mercury 4394388505077057 1416 : mercury 4394388494130865 1416 : 10946192 0
mercury 4394389509415143 1417 : mercury 4394389498635581 1417 : 10781562 0
mercury 4394390512999205 1418 : mercury 4394390502227170 1418 : 10772035 0
^Z
[1]+ Stopped timesource | internettool -6 -u -P 5555 -A ::ffff:192.168.2.190 | timesink
jsloan@mercury:~/src/com-diag-diminuto/Diminuto$
```

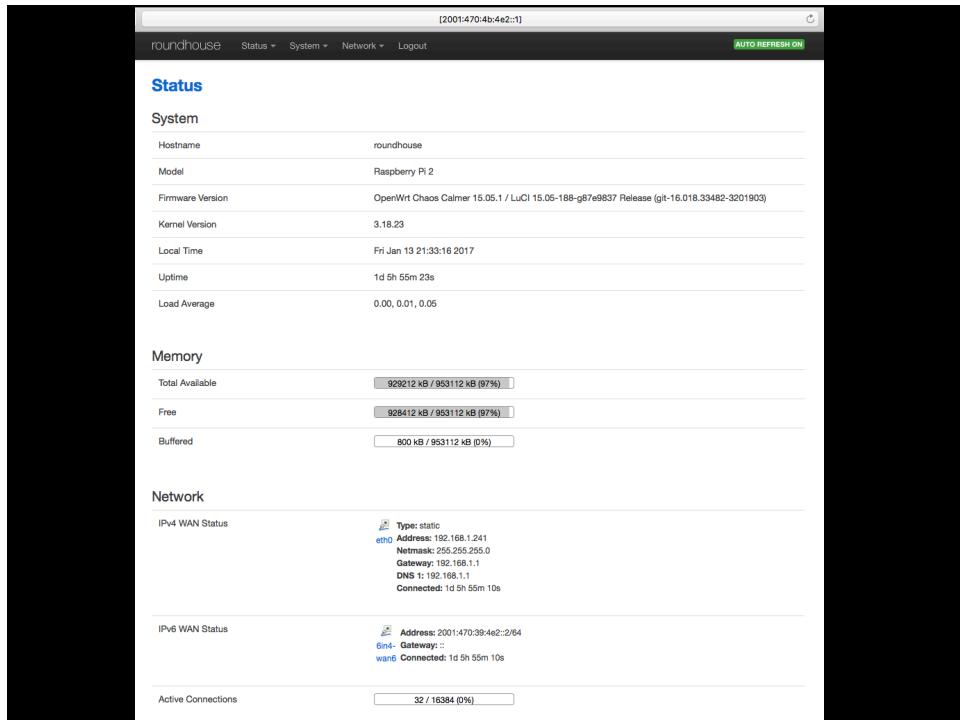
```

9. pi@bronze: ~/src/com-diag-diminuto/Diminuto (ssh)
bronze 12221943741260 1384 : bronze 12220914183186 1384 : 1029558074 0
bronze 12222958455324 1385 : bronze 12221929599438 1385 : 1028855886 0
bronze 12223973037723 1386 : bronze 12222943666628 1386 : 1029371095 0
bronze 12224987694496 1387 : bronze 12223957744287 1387 : 10299580299 0
bronze 12226002176791 1388 : bronze 12224971712050 1388 : 1030464741 0
bronze 12227016732523 1389 : bronze 12225985526272 1389 : 1031206251 0
bronze 12228031594088 1390 : bronze 12227800037316 1390 : 1031556772 0
bronze 12229046159820 1391 : bronze 12228014096434 1391 : 1032063386 0
bronze 122306060714093 1392 : bronze 12229028525384 1392 : 1032387769 0
bronze 12231075169409 1393 : bronze 12230642559961 1393 : 1032609428 0
bronze 12232086636360 1394 : bronze 12231056513109 1394 : 1033170521 0
bronze 12233104279154 1395 : bronze 12232070508111 1395 : 1033771043 0
bronze 1223411924469 1396 : bronze 12233084384469 1396 : 1034740000 0
bronze 12235133663691 1397 : bronze 12234098631596 1397 : 1035032189 0
bronze 12236148569787 1398 : bronze 1223511246218 1398 : 1036107605 0
bronze 12237163111769 1399 : bronze 12236126760623 1399 : 1036351146 0
bronze 12238177850677 1400 : bronze 12237140719113 1400 : 1037131562 0
bronze 12239192224326 1401 : bronze 12238154742972 1401 : 1037541354 0
bronze 12240206832611 1402 : bronze 12239169125422 1402 : 1037707189 0
bronze 12241221733342 1403 : bronze 12240183181363 1403 : 1038551979 0
bronze 12242236716991 1404 : bronze 12241197377927 1404 : 1039333064 0
^Z
[1]+ Stopped timesource | internettool -4 -u -P 5555 -A 192.168.2.190 | timesink
pi@bronze:~/src/com-diag-diminuto/Diminuto$
```



```

6. pi@zinc: ~/src/com-diag-diminuto/Diminuto (ssh)
zinc 106351610887041 1381 : zinc 106350762819366 1381 : 848867675 0
zinc 10635262590649 1382 : zinc 106351776771296 1382 : 849138353 0
zinc 106353640579547 1383 : zinc 10635279862965 1383 : 850116582 0
zinc 10635465152414 1384 : zinc 106353804638697 1384 : 851513717 0
zinc 106355671347312 1385 : zinc 106354818679012 1385 : 852668300 0
zinc 1063556686314295 1386 : zinc 106355832883026 1386 : 853511269 0
zinc 106357701061224 1387 : zinc 106356846753393 1387 : 854307831 0
zinc 106358716254769 1388 : zinc 106357868875687 1388 : 855379082 0
zinc 106359731035709 1389 : zinc 106358874966428 1389 : 856129289 0
zinc 106360746128628 1390 : zinc 106359889035432 1390 : 857093196 0
zinc 106361760994380 1391 : zinc 106360902734967 1391 : 858259341 0
zinc 106362776104415 1392 : zinc 106361916588407 1392 : 859516008 0
zinc 106363790955198 1393 : zinc 106362930614972 1393 : 860340226 0
zinc 106364806165202 1394 : zinc 106363944477371 1394 : 861687831 0
zinc 106365820982339 1395 : zinc 106364958785692 1395 : 862196737 0
zinc 106366835698176 1396 : zinc 106365972806751 1396 : 862891425 0
zinc 106367850285834 1397 : zinc 106366987062691 1397 : 863223143 0
zinc 106368864783546 1398 : zinc 106368001101496 1398 : 863682050 0
zinc 106369879673912 1399 : zinc 106369015020093 1399 : 864653819 0
zinc 106370894134020 1400 : zinc 106370029443116 1400 : 864690904 0
zinc 10637190867511 1401 : zinc 106371043569057 1401 : 865398454 0
^Z
[1]+ Stopped timesource | internettool -4 -u -A 192.168.1.241 -P 5555 | timesink
pi@zinc:~/src/com-diag-diminuto/Diminuto $ 
```



The screenshot shows a web-based monitoring interface for a Raspberry Pi 2 running OpenWrt Chaos Calmer 15.05.1. The interface includes sections for System status, Memory usage, Network connections, and Active connections.

**Status**

**System**

- Hostname: roundhouse
- Model: Raspberry Pi 2
- Firmware Version: OpenWrt Chaos Calmer 15.05.1 / LuCI 15.05-188-g87e9837 Release (git-16.018.33482-3201903)
- Kernel Version: 3.18.23
- Local Time: Fri Jan 13 21:33:16 2017
- Uptime: 1d 5h 55m 23s
- Load Average: 0.00, 0.01, 0.05

**Memory**

Total Available	928212 kB / 953112 kB (97%)
Free	928412 kB / 953112 kB (97%)
Buffered	800 kB / 953112 kB (0%)

**Network**

**IPv4 WAN Status**

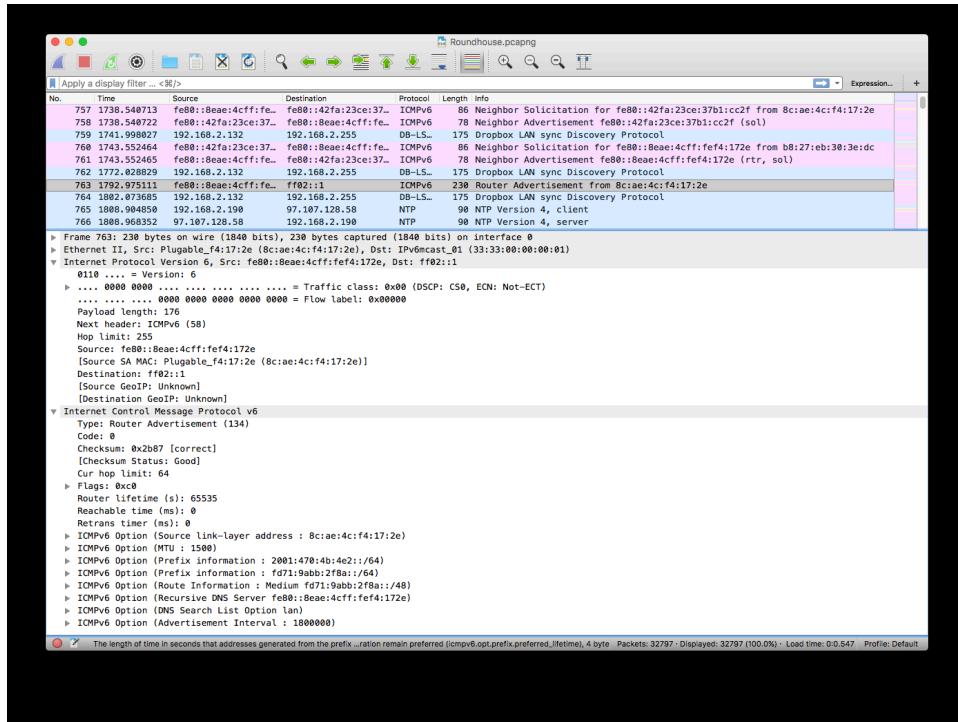
- Type: static
- eth0: Address: 192.168.1.241
- Netmask: 252.255.255.0
- Gateway: 192.168.1.1
- DNS 1: 192.168.1.1
- Connected: 1d 5h 55m 10s

**IPv6 WAN Status**

- Address: 2001:470:39:4e2::2/64
- 6in4: Gateway: ::
- wan6: Connected: 1d 5h 55m 10s

**Active Connections**

32 / 16384 (0%)



```

ping6
traceroute6
ssh -6
ip -6
ip -6 neigh show
wget -6
route -A inet6
nslookup -query=AAAA
host -t AAAA
http://[2600:100e:b003:f288:c265:6ca3:85c8:4f68]

```

```

root@roundhouse:~# ip -6 neigh show
fe80::18e4:e558:c34:4fef dev eth0 lladdr f0:d1:a9:d9:1f:4d STALE
fe80::c91:95b:e393:a070 dev eth0 lladdr 60:fe:c5:d2:4c:63 STALE
2001:470:4b:4e2:c138:3e34:511b:bd41 dev br-lan lladdr 8c:ae:4c:f4:04:0c STALE
2001:470:4b:4e2:e79:7f1e:21f5:9355 dev br-lan lladdr b8:27:eb:30:3e:dc STALE
2001:470:4b:4e2:3569:edf2:e6e:da37 dev br-lan lladdr 8c:ae:4c:f4:32:00 STALE
2001:470:4b:4e2:92d3:a519:6d57:b1e4 dev br-lan lladdr b8:27:eb:80:3e:6c STALE
fe80::cb1:75d1:b3f9:a1e6 dev eth0 lladdr 98:fe:94:78:86:42 STALE
fe80::42fa:23ce:37b1:cc2f dev br-lan lladdr b8:27:eb:30:3e:dc STALE
2001:470:4b:4e2:dc86:c303:3dc5:f33e dev br-lan lladdr b8:27:eb:23:63:5a STALE
2001:470:4b:4e2:35:1173:ad3:71b8 dev br-lan lladdr 8c:ae:4c:f4:32:00 STALE
fe80::a2b7:5f4b:a1a3:7cf9 dev br-lan lladdr b8:27:eb:80:3e:6c STALE
fe80::469:d1a:6551:268d dev eth0 lladdr 2c:f0:a2:a4:42:8c STALE
fe80::810a:5082:5cc5:1368 dev br-lan lladdr b8:27:eb:23:63:5a STALE
fe80::1c84:b904:4c53:353e dev br-lan lladdr 8c:ae:4c:f4:32:00 STALE
root@roundhouse:~#

```

**Test your IPv6 connectivity.**

Your IPv4 address on the public Internet appears to be 73.3.193.194 (COMCAST-7922 - Comcast Cable Communications, LLC, US)

Your IPv6 address on the public Internet appears to be 2001:470:4b:4e2:e79:7f1e:21f5:9355 (HURRICANE - Hurricane Electric, Inc., US)

Since you have IPv6, we are including a tab that shows how well you can reach other IPv6 sites. [\[more info\]](#)

It appears that you use a tunnel mechanism for either IPv4 or IPv6.

Good news! Your current configuration will continue to work as web sites enable IPv6.

Your DNS server (possibly run by your ISP) appears to have IPv6 Internet access.

**Your readiness score**

**10/10** for your IPv6 stability and readiness, when publishers are forced to go IPv6 only

Click to see [test data](#)

(Updated server side IPv6 readiness stats)

This instance of test-ipv6.com is provided by [Comcast](#)

Copyright (C) 2010, 2016 Jason Fesler. All rights reserved. Version 1.1.526 (6b3c9df)  
[Mirrors](#) | [Source](#) | [Email](#) - [Attributions](#) | [Debug](#) | [About](#) | [Feedback](#)

