

For our traceroutes we used a UNM computer attached to the ECE server.

1. The three traceroutes show similar routes up to line 7. The lines up to seven are most likely the network from our host network to the access ISP. The packets are then sent to either regional ISPs, tier 1 ISPs or content delivery networks.
2. The default maximum number of hops for the traceroute command is 30. Both presidencia.gob.ve and jnto.go.jp take longer than 30 hops. We tried increasing the number of hops to the maximum value 255 and it still did not respond.
3. presidencia.gob.ve took over 200ms before it stopped responding and jnto.go.jp took over 100ms while google.com only took 34ms. There are a few reasons why this is. For one, .ve and .jp are Venezuela and Japan networks, so there will be a lot of cable that will introduce propagation delay. While Venezuela is closer to the US than Japan, Japan has a much faster network. Venezuela may not be able to keep up the demand that Japan can get due to their infrastructure, which can introduce slow downs like queueing delay. Google on the other hand is so fast because we connect to one of their content delivery networks that are able to handle enormous amount of traffic.

Attached below are our trace routes for presidencia.gob.ve , www.jnto.go.jp, and google.com; respectively.

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1  traceroute to presidencia.gob.ve (190.202.23.171), 30 hops max, 60 byte
   packets
2  1  129.24.28.1 (129.24.28.1) 0.895 ms 1.099 ms 1.460 ms
3  2  198.83.93.121 (198.83.93.121) 0.813 ms 0.811 ms 0.794 ms
4  3  rtr-129-24-192-69.unm.edu (129.24.192.69) 0.775 ms 0.758 ms 0.740 ms
5  4  129.24.212.33 (129.24.212.33) 1.766 ms 2.066 ms 2.048 ms
6  5  208.77.76.150 (208.77.76.150) 1.693 ms 2.000 ms 1.963 ms
7  6  dc-lax-aggr1--unm.cenic.net (137.164.50.193) 22.997 ms 23.005 ms
   22.981 ms
8  7  dc-lax-aggr6--lax-aggr1-10ge.cenic.net (137.164.46.105) 23.629 ms
   23.609 ms 23.607 ms
9  8  xe-9-3-0.edge5.losangeles1.level3.net (4.59.48.177) 34.356 ms 34.359
   ms 34.041 ms
10 9  ae-3-80.edge2.losangeles9.level3.net (4.69.144.143) 34.021 ms
   ae-4-90.edge2.losangeles9.level3.net (4.69.144.207) 48.113 ms
   ae-3-80.edge2.losangeles9.level3.net (4.69.144.143) 34.048 ms
11 10 telecomitalia-level3.losangeles9.level3.net (4.68.71.2) 131.835 ms
   131.846 ms 131.828 ms
12 11 ge9-0-0.miami2.mia.seabone.net (195.22.199.217) 161.166 ms 174.909
   ms 162.140 ms
13 12 cantv.miami2.mia.seabone.net (195.22.199.106) 218.801 ms 218.807 ms
   218.789 ms
14 13 * * *
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15 14 * * *
16 15 * * *
17 16 * * *
18 17 190-202-24-214.estatic.cantv.net (190.202.24.214) 200.523 ms 200.492
    ms 200.488 ms
19 18 * * *
20 19 * * *
21 20 * * *
22 21 * * *
23 22 * * *
24 23 * * *
25 24 * * *
26 25 * * *
27 26 * * *
28 27 * * *
29 28 * * *
30 29 * * *
31 30 * * *

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1 traceroute to www.jnto.go.jp (202.79.244.228), 30 hops max, 60 byte
  packets
2 1 129.24.28.1 (129.24.28.1) 0.866 ms 1.094 ms 1.434 ms
3 2 198.83.93.121 (198.83.93.121) 0.828 ms 0.818 ms 0.811 ms
4 3 rtr-129-24-192-69.unm.edu (129.24.192.69) 0.794 ms 0.786 ms 1.001 ms
5 4 129.24.212.33 (129.24.212.33) 3.776 ms 3.497 ms 3.721 ms
6 5 208.77.76.150 (208.77.76.150) 1.812 ms 1.799 ms 1.768 ms
7 6 dc-lax-aggr1--unm.cenic.net (137.164.50.193) 23.348 ms 22.804 ms
    22.788 ms
8 7 dc-lax-aggr6--lax-aggr1-10ge.cenic.net (137.164.46.107) 24.800 ms
    25.565 ms 25.545 ms
9 8 peering.kddi.com (198.32.146.36) 23.301 ms 23.209 ms 23.205 ms
10 9 lajbb001.int-gw.kddi.ne.jp (59.128.2.209) 23.647 ms
    lajbb002.int-gw.kddi.ne.jp (59.128.2.213) 23.643 ms
    lajbb001.int-gw.kddi.ne.jp (59.128.2.209) 23.634 ms
11 10 otejbb205.int-gw.kddi.ne.jp (203.181.100.57) 124.664 ms 122.648 ms
    otejbb206.int-gw.kddi.ne.jp (203.181.100.61) 124.066 ms
12 11 cm-ote258.int-gw.kddi.ne.jp (118.155.197.53) 124.061 ms
    cm-ote258.int-gw.kddi.ne.jp (118.155.197.181) 125.352 ms
    cm-ote258.int-gw.kddi.ne.jp (118.155.197.53) 125.063 ms
13 12 118.155.202.2 (118.155.202.2) 125.309 ms 125.305 ms 125.006 ms
14 13 jst-nttdata-tgcore02togw01.stream.co.jp (202.79.242.150) 123.537 ms
    123.541 ms 130.546 ms
15 14 202.79.242.252 (202.79.242.252) 123.813 ms 124.087 ms 124.089 ms
16 15 * * *
17 16 * * *
18 17 * * *
19 18 * * *
20 19 * * *
21 20 * * *

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22 21 * * *
23 22 * * *
24 23 * * *
25 24 * * *
26 25 * * *
27 26 * * *
28 27 * * *
29 28 * * *
30 29 * * *
31 30 * * *
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1 traceroute to www.google.com (74.125.224.179), 30 hops max, 60 byte
  packets
2 1 129.24.28.1 (129.24.28.1) 0.945 ms 0.954 ms 1.311 ms
3 2 198.83.93.121 (198.83.93.121) 0.929 ms 0.925 ms 1.267 ms
4 3 rtr-129-24-192-69.unm.edu (129.24.192.69) 0.888 ms 0.883 ms 1.244 ms
5 4 129.24.212.33 (129.24.212.33) 4.731 ms 4.724 ms 4.715 ms
6 5 208.77.76.150 (208.77.76.150) 1.668 ms 1.663 ms 1.657 ms
7 6 dc-lax-agg1--unm.cenic.net (137.164.50.193) 23.368 ms 22.883 ms
  22.868 ms
8 7 dc-lax-agg6--lax-agg1-10ge.cenic.net (137.164.46.107) 23.491 ms
  23.487 ms 23.726 ms
9 8 72.14.223.85 (72.14.223.85) 35.250 ms 47.450 ms 34.235 ms
10 9 64.233.174.238 (64.233.174.238) 40.049 ms 34.514 ms 47.388 ms
11 10 72.14.236.11 (72.14.236.11) 47.389 ms 34.839 ms 34.572 ms
12 11 lax02s01-in-f19.1e100.net (74.125.224.179) 34.021 ms 34.277 ms *
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