Does peering make anycast better?

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Anycast

- anycast nodes are "everywhere"
  - ideally there's a node "close to" everybody
  - deploy a bunch around the world

- What connectivity?
  - transit only
  - with peering
  - drop them into ISPs that have a combination

What are the questions here?

- Generally accepted as true
  - if some anycast is good, a lot *must* be better
  - peering is good.

- Do more nodes make for better connectivity?
- Is peering better than transit?

What are we measuring?

- network latency
  - from a bunch of probes to anycast IPs

- We're going to use root DNS servers
  - some with few nodes, some with many nodes

- also some other DNS servers
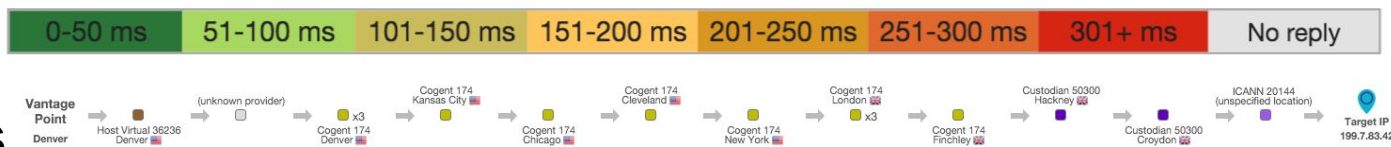 - some transit only, with no peering
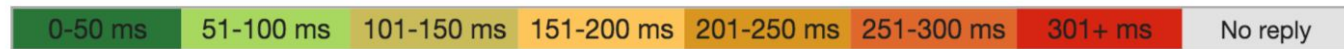
A root

5 nodes

F root
~60 nodes

| 0-50 ms | 51-100 ms | 101-150 ms | 151-200 ms | 201-250 ms | 251-300 ms | 301+ ms | No reply |

L root
~150 nodes

Transit

~20 nodes

8.8.8.8

| 0-50 ms | 51-100 ms | 101-150 ms | 151-200 ms | 201-250 ms | 251-300 ms | 301+ ms | No reply |

Summary

- A lot of anycast nodes isn't really a lot better.
- Peering can be meh or downright bad.
  - You will need to do traffic engineering to make sure you don't drag traffic long distances.
- Peering can be good. See 8.8.8.8
- This is very YMMV.

- Any interest in a more thorough talk on this?

Thank you

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