# Explorations in the Public Peering Address Space

NANOG 41 Lightning Talk

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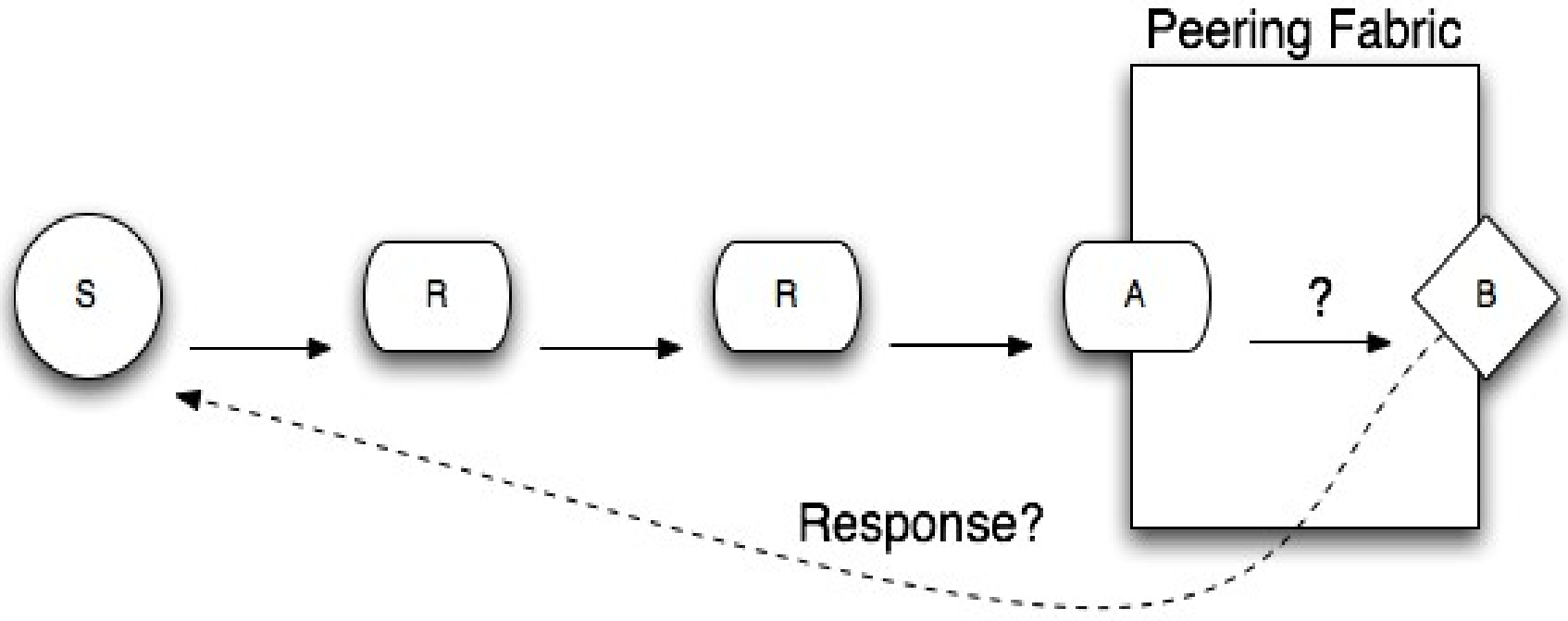
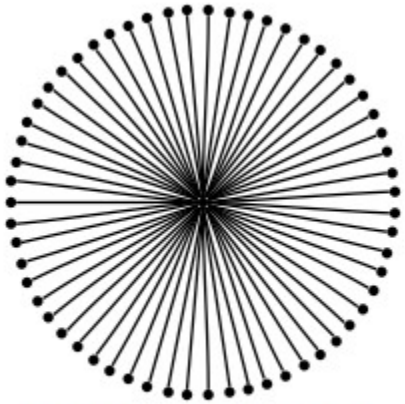
# Peer discovery using traceroute



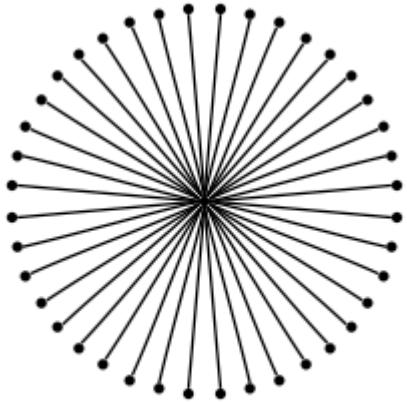
# Trace selection and collection

- Obtain list of exchange netblocks from peeringdb
  - Over 125 prefixes, mostly /24's
- Private shell nodes running traceroute
- http://www.scriptroute.org
- Combat Perl code to parse output

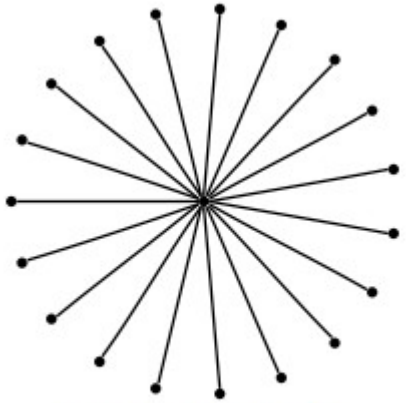
# Speakeasy, AS 23504



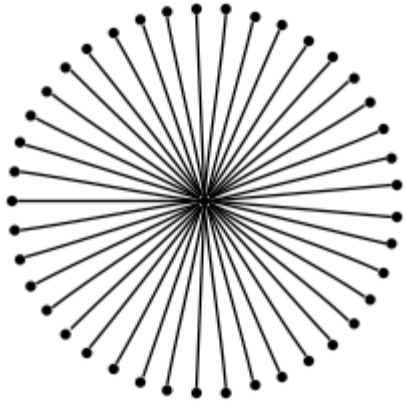
Equinix Ashburn (59)



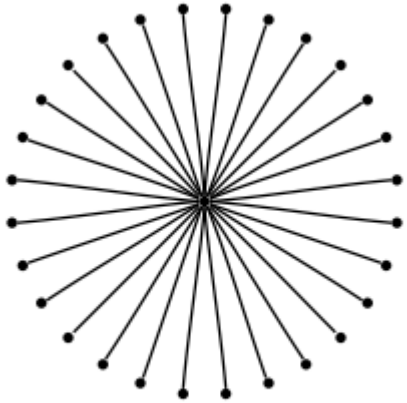
Equinix San Jose (40)



Equinix Dallas (19)

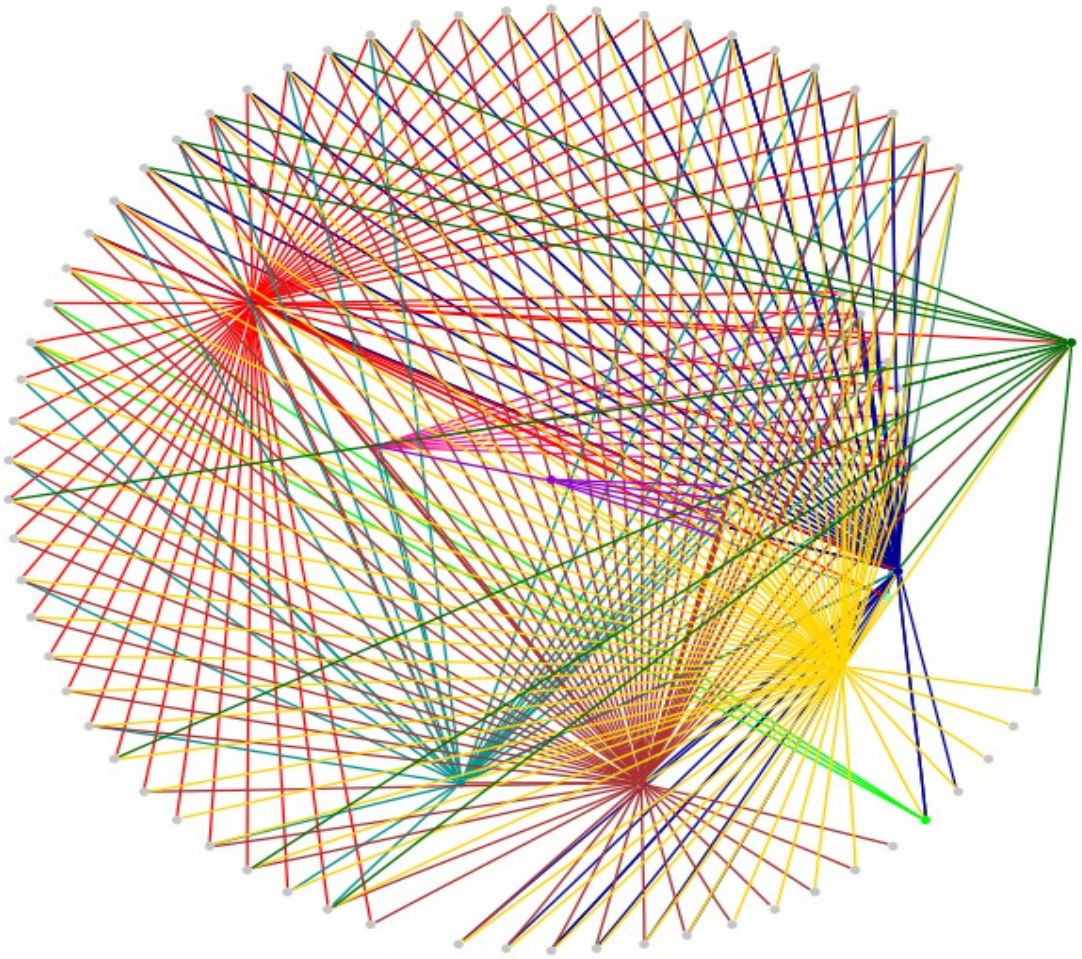


Equinix Chicago (41)



Equinix Los Angeles (28)

# Exchange Peering Graph



Equinix Ashburn (sample)

# Netblock visibility

- Most networks seem to announce these netblocks
  - Sometimes globally, sometimes internally
  - Sometimes even into the global multicast RIB
- Why?
  - Some services only available via those addrs?
    - e.g. Route servers
  - Default redistribute connected?
- Do we care?
- Go see route-views and looking glass sites for detail

# Final thoughts

- Enables easier BGP spoofing attacks?
- What if someone announced a more specific?
- Geographic DDoS attack vector?
- Network enumeration/privacy issues?
- Helps researchers better understand topology?
- Exchange operator market research?
- Hints for optimizing peering selection/placement?
- Facilitates transit theft
- Would published peering maps be of interest?