Building a Global Peering Footprint from the Outback

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Who?

- Internode is 5th largest broadband ISP in Australia
- 50% residential / 50% business
- Focuses on customers who want quality - willing to pay a bit more for a better network

Why?

- Building a better quality network
- Having control over connectivity
  - Peering means control
- Ability to do new things - Internode is a thought leader in new technologies

IPv6

- In 2007 - no IPv6 commercially available in Australia
- CEO said “Do it” and we did
- Turned up transit, peering in USA in Oct 2007, did ethernet customers then trialled broadband IPv6 in ~2009.
- In 2011 made IPv6 part of residential ISP product.

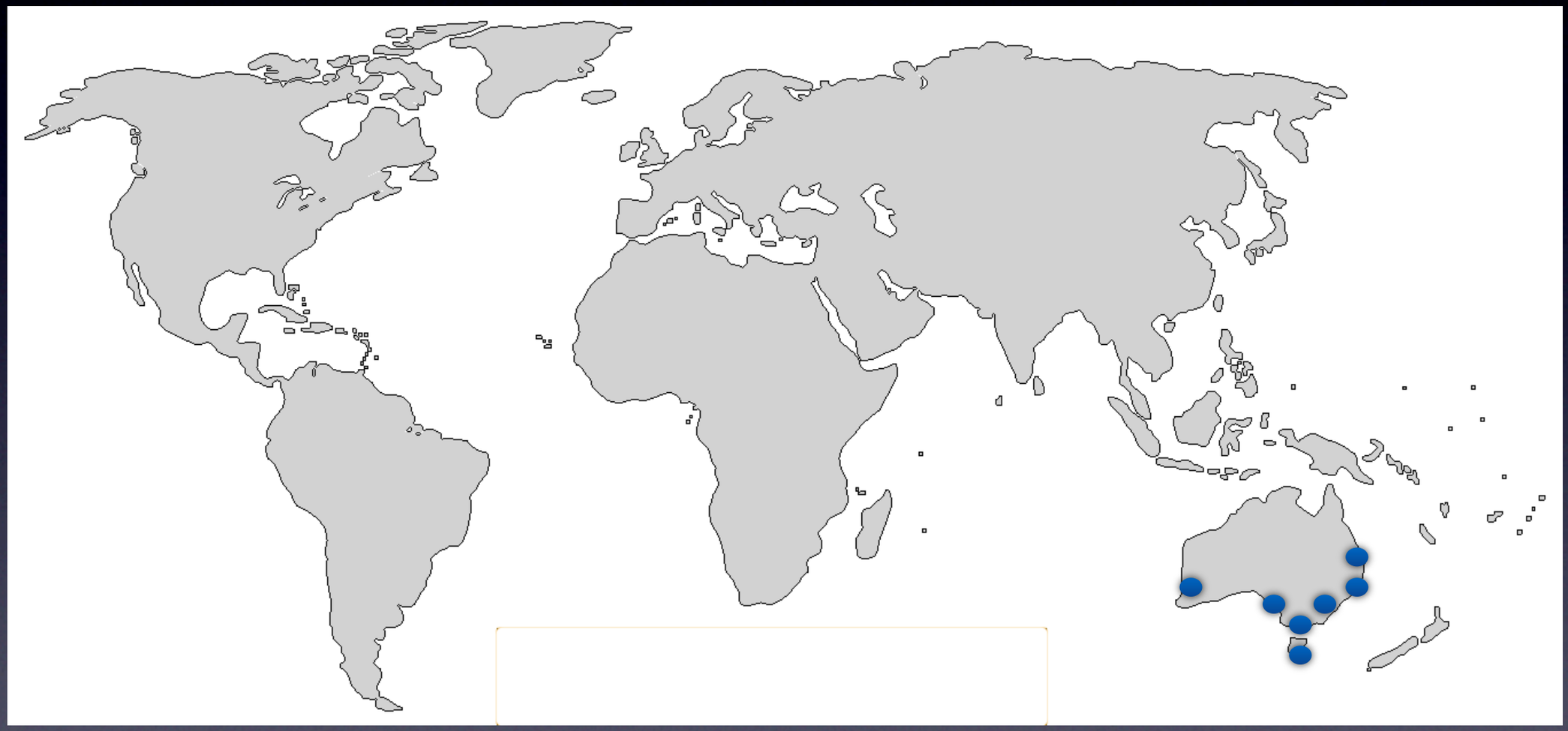
How?

- Fairly fixed offshore (non-AU) opex budget
  - Provide better connectivity and more Mbps without asking for more money (mostly).
  - Support and understanding from senior management to do peering and that it's better.
- Int'l Transit only in USA West Coast, Japan
  - Other POPs PEERING ONLY!

Choice of IX/Locations

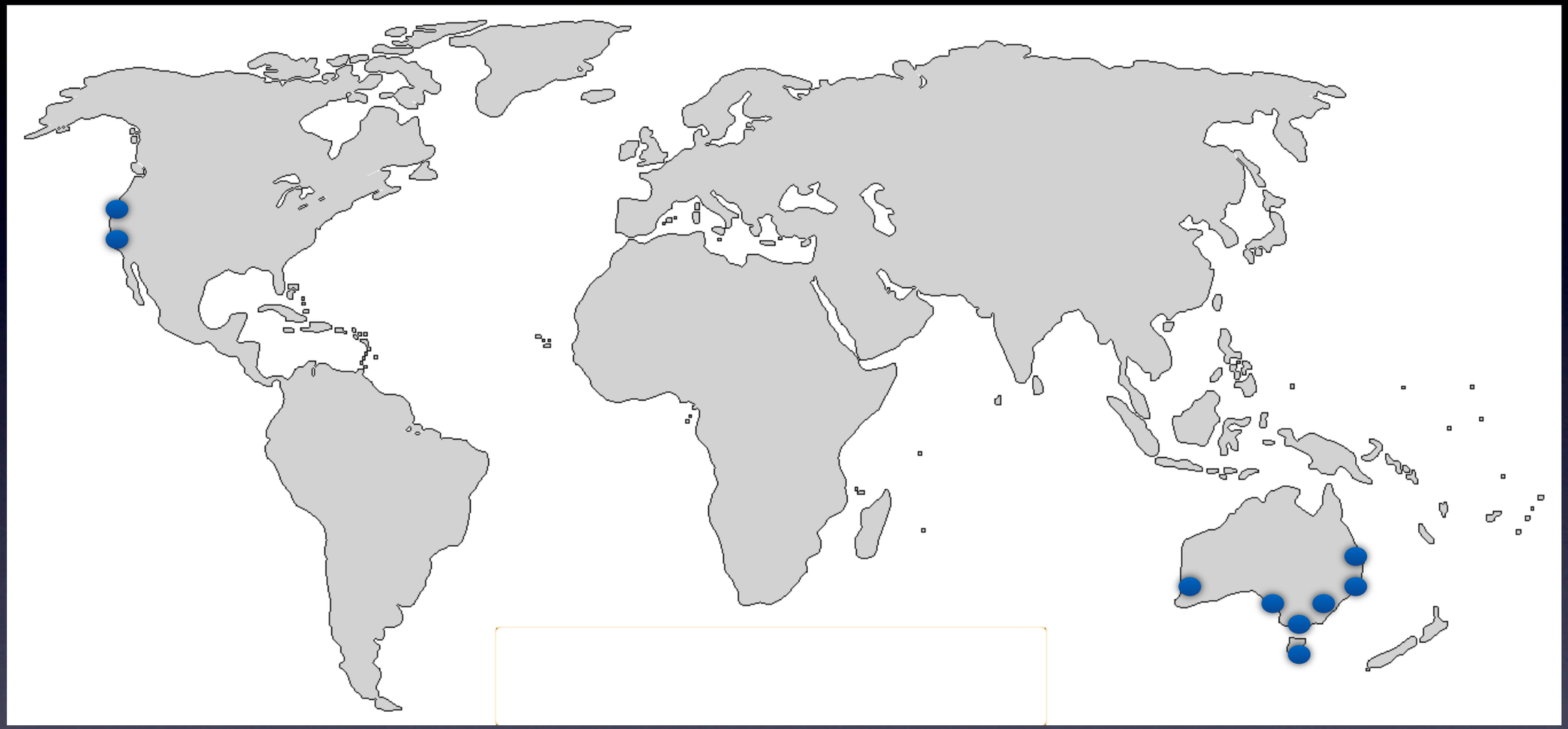
- At each IX:
  - who can you peer with (peeringdb.com)
  - how many Mbps?
  - does this make it similar to transit or less?
  - If so, join IX.

2004



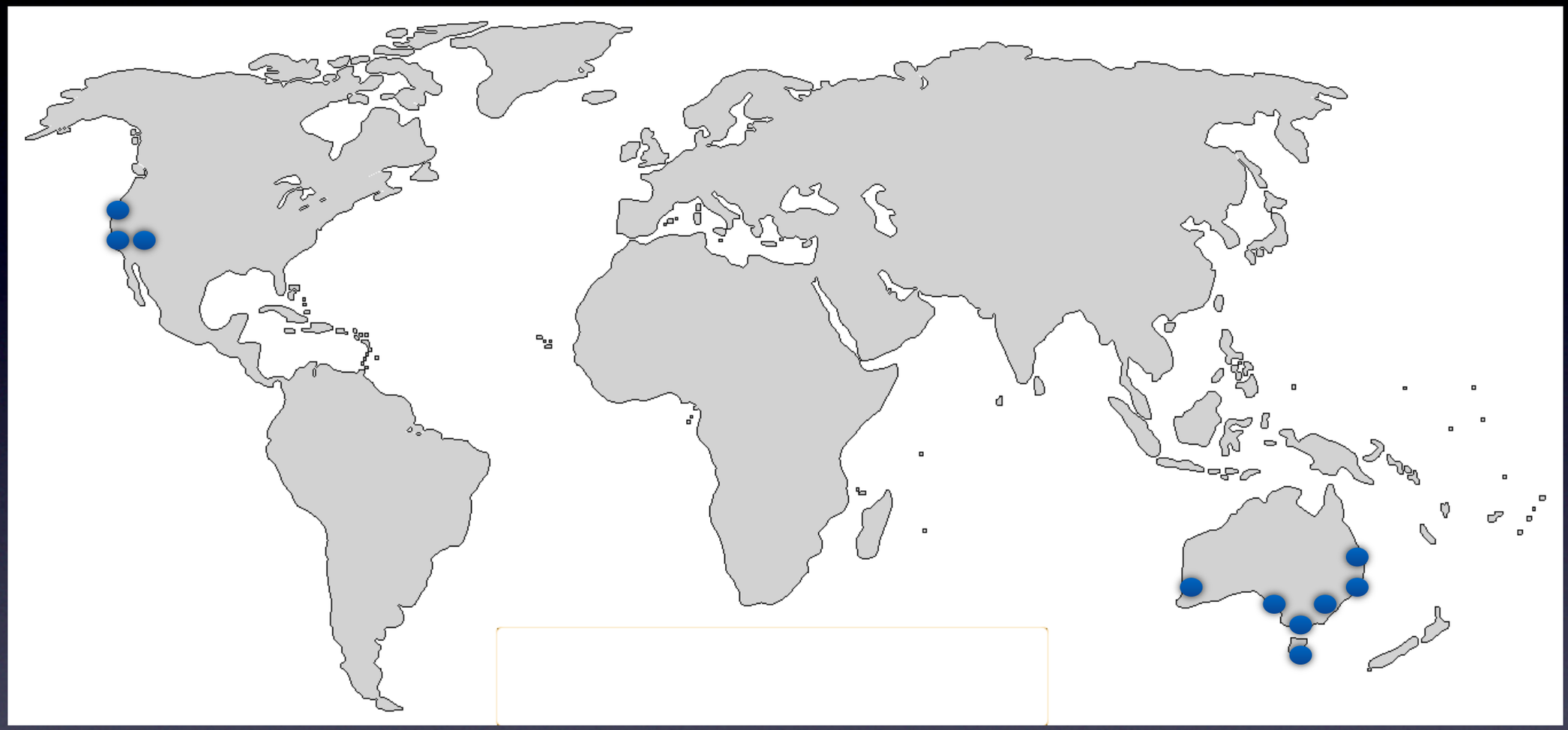
- 7 Australia IXes - Transit in Australia Only

2005



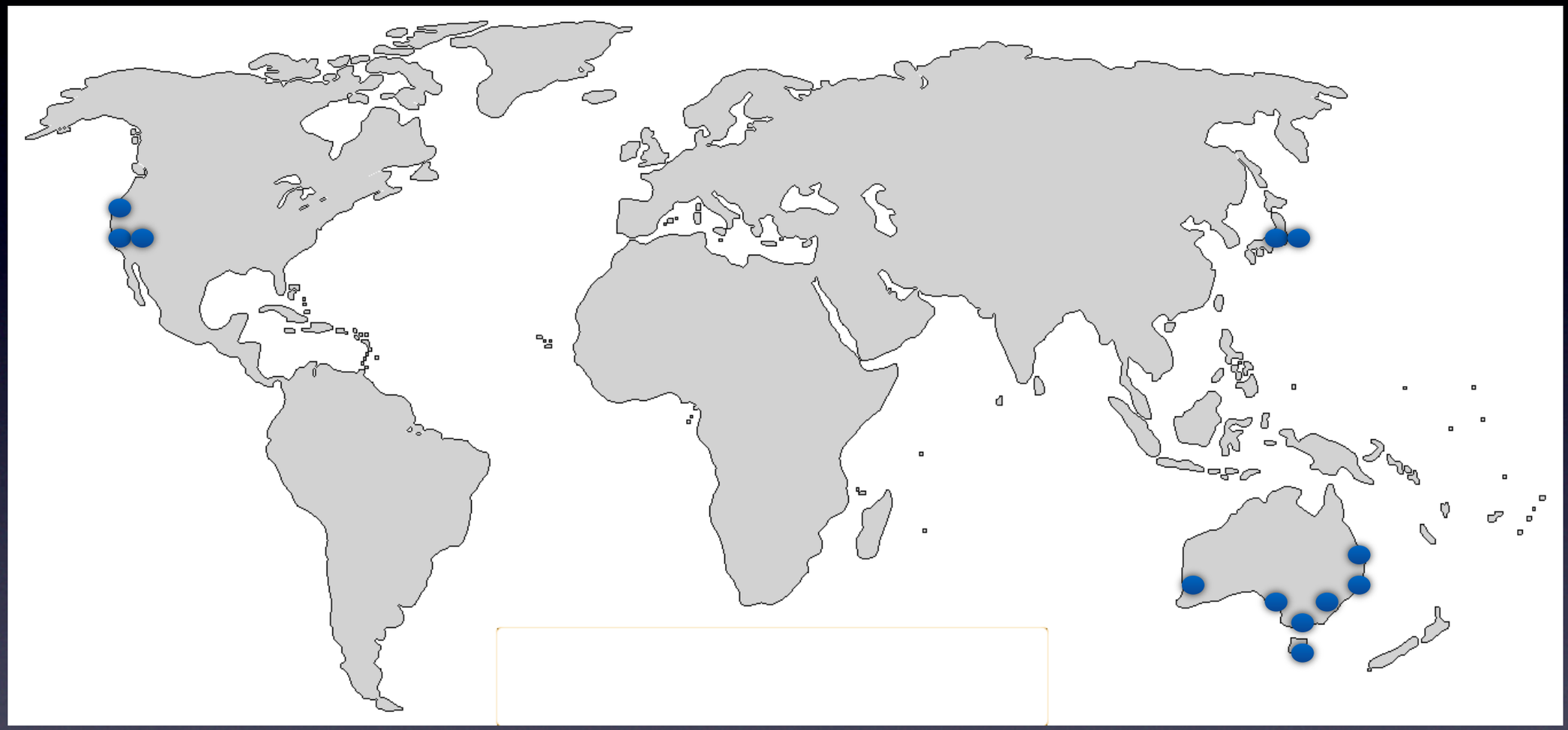
- West Coast USA (Equinix LA, San Jose)
- No international transit in Australia

2007



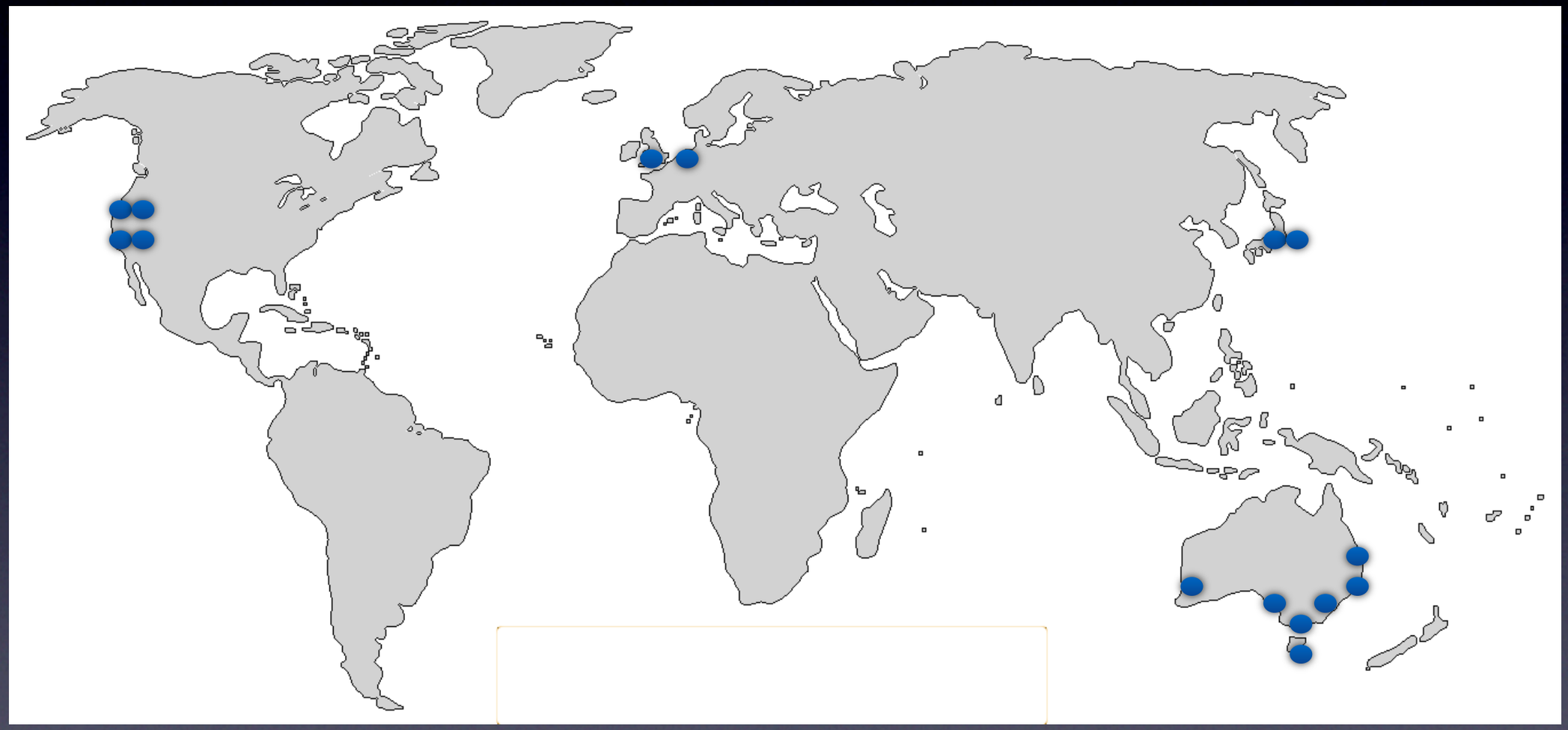
- Any2 California (Los Angeles)

2008



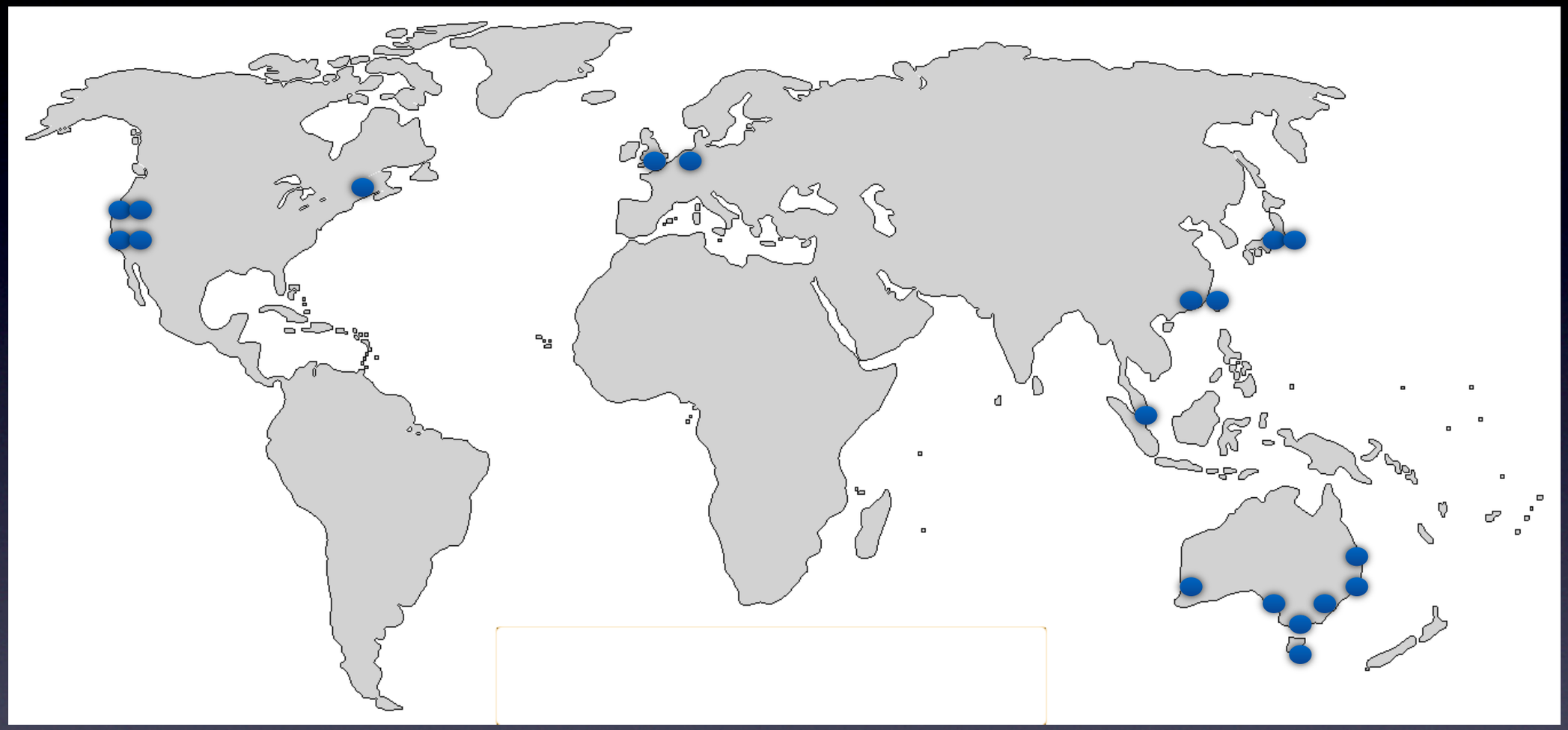
- Equinix Tokyo, JPIX, additional Australian IX

2009



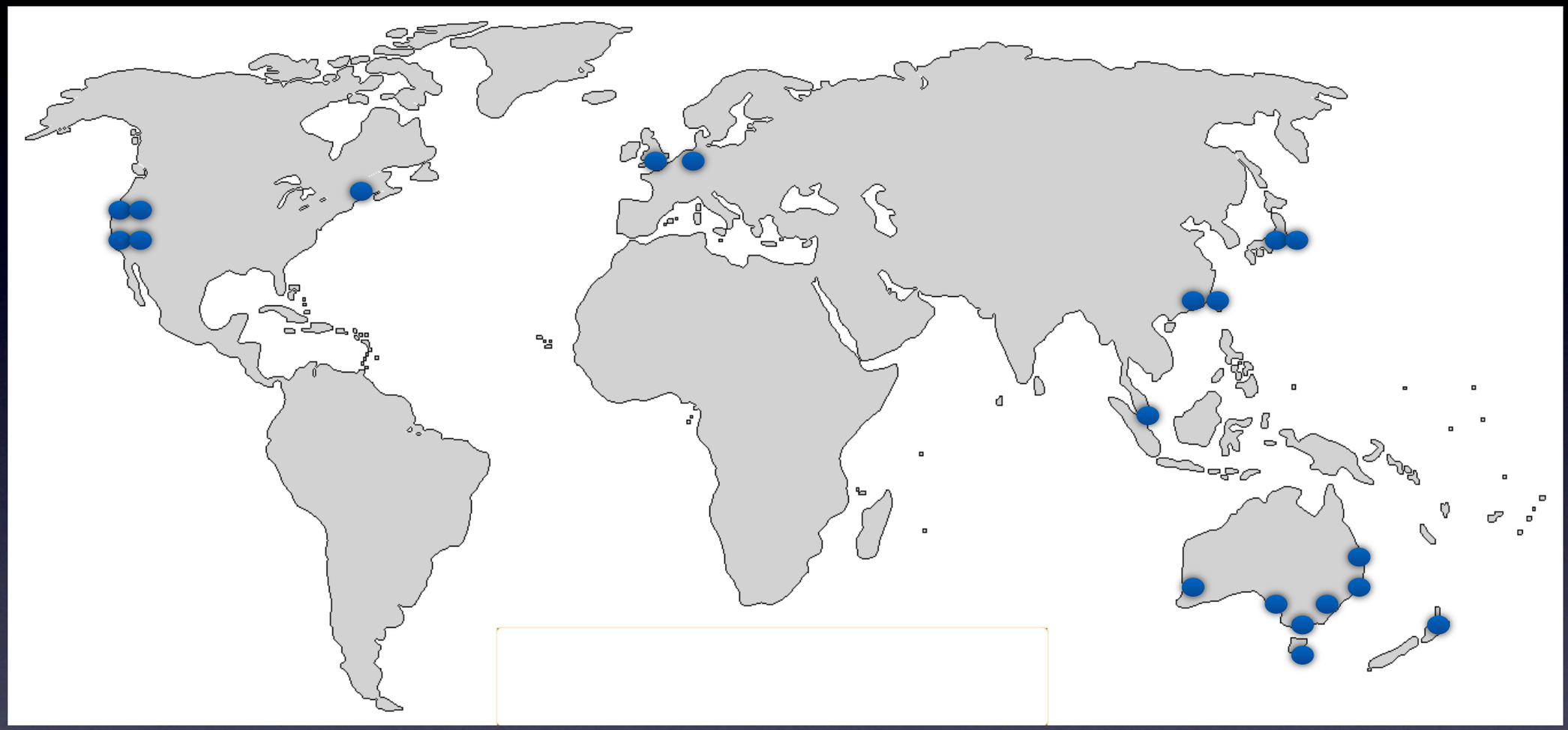
- AMS-IX, LINX, PAIX Palo Alto
- VLL Ethernet to Europe - no POP

2010 (I)



- HKIX, Equinix Singapore, Equinix HK
- Shorter Path via SMW3 to Singapore, Europe via SMW4

2010 (2)



- Equinix Ashburn - Built around the world!
- APE in NZ

How'd it go?

- Ended up with ~75% inbound traffic being peering
- Reduced transit cost significantly
- Very well connected - low average AS path length

Thank You