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 (1)

- 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