

APRICOT 2009 - Manila Philippines

Peering in Australia

or how to 'throw another AS on the IX mate'

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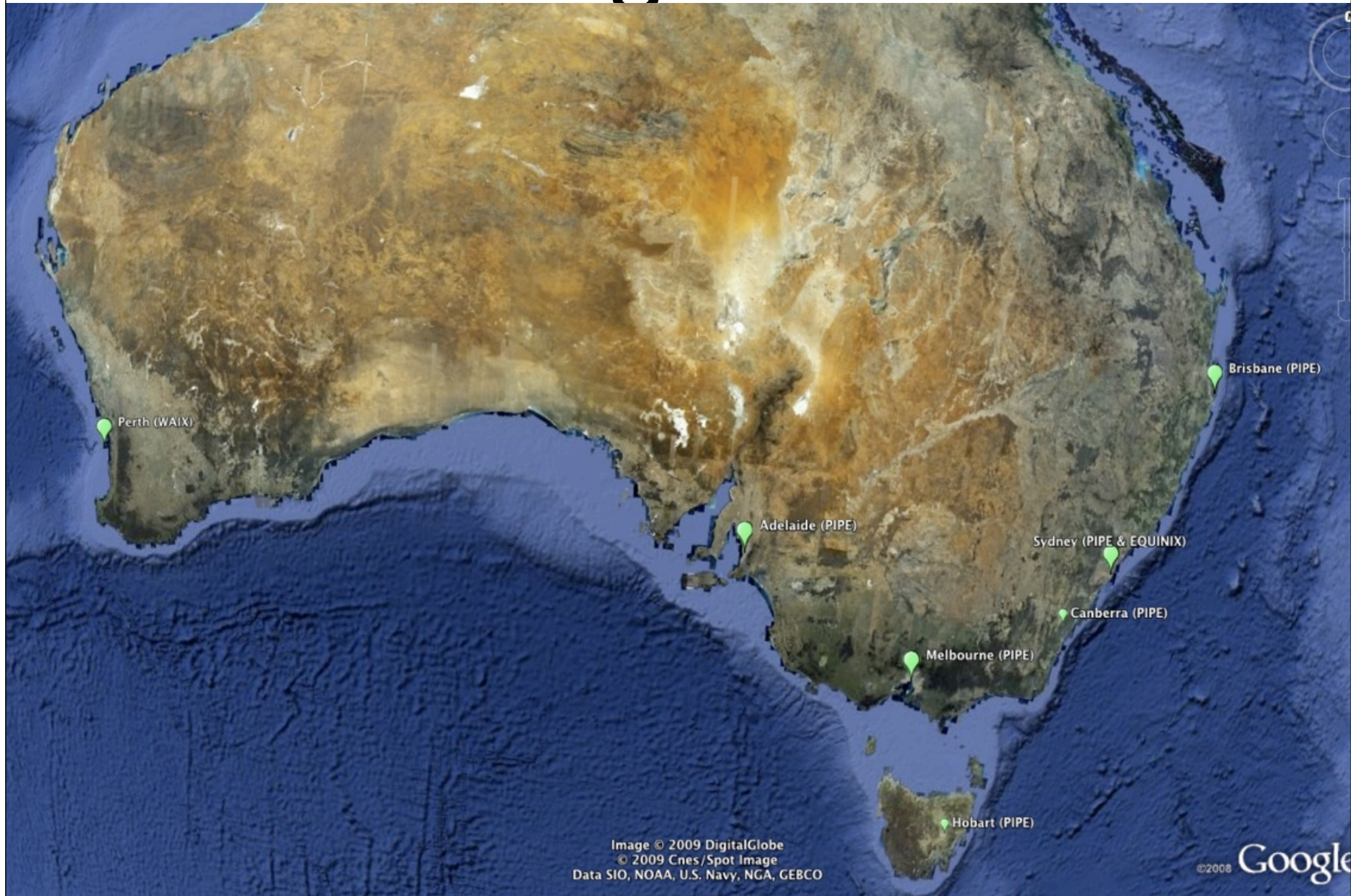
Australia is Big

... really Big !

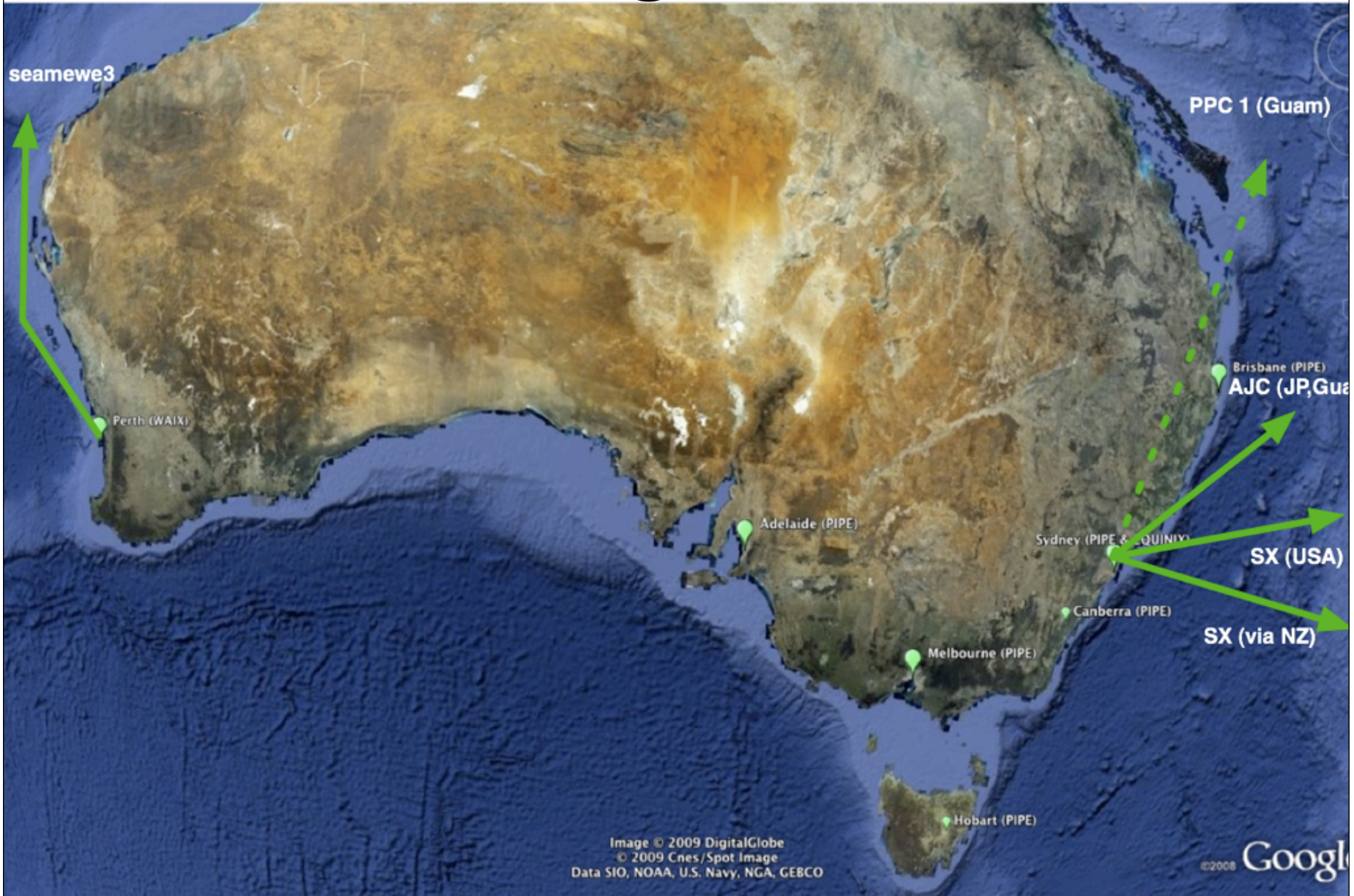
Position	Country	Area (km ²)	% World	Population	# ppl / km ²
1	Russia	17,098,242	11.50%	141,853,580	8.4
2	Canada	9,984,670	6.70%	33,563,000	3
3	China	9,598,094	6.50%	1,335,962,132	138
4	USA	9,629,091	6.40%	305,862,000	31
5	Brazil	8,514,877	5.70%	190,769,000	22
6	Australia	8,514,877	5.20%	21,597,121	2.84
75	New Zealand	270,467	0.18%	4,297,537 (not inc. sheep)	14.9

Only 5 countries less densely populated;
French Guiana, Mongolia, Western Sahara, Falkland Islands & Greenland

Exchange Points



Getting to AU



L2 Capacity Options

Direct from Cable Companies (SX, AJC, PPCI)
SDH/SONET from Telcos (TNZ, Pacnet, Verizon, Vocus)
Ethernet (Vocus)

In Country Options

In country capacity is about the same the wet portion

All large Australian networks (that peer) are present in Sydney

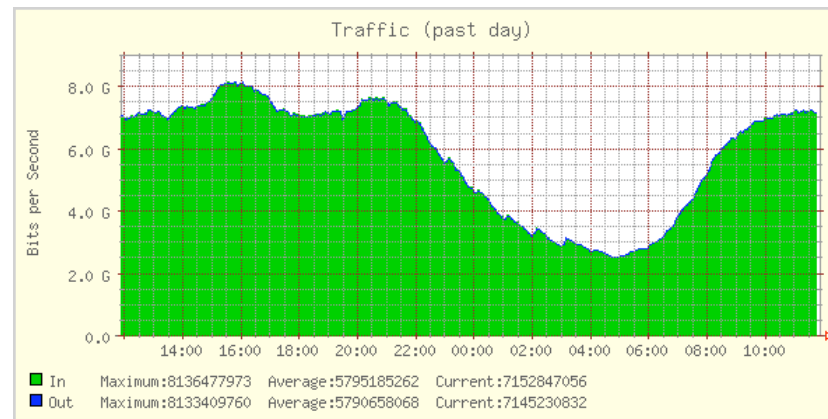
We'll cover Perth & Sydney

A look at each IX

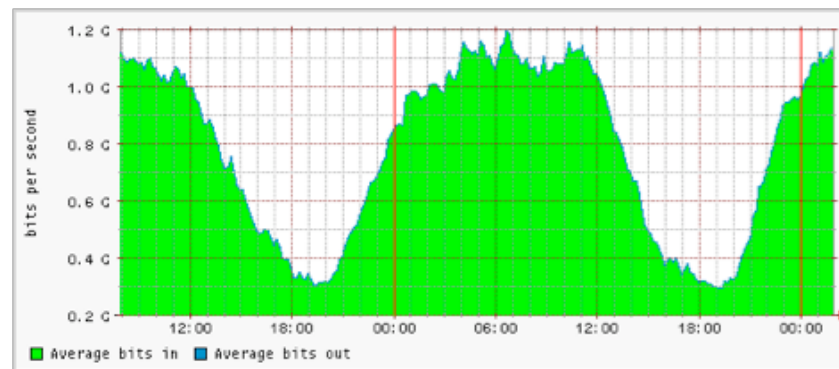
- **Sydney**
 - **PIPE - Global Switch (400 Harris Street Ultimo NSW)**
 - 41,575m² (447,509 sq ft)
 - IPv4/IPv6
 - No remote hands
 - Self Service cabling
 - IX itself distributed (accessible via Equinix and others)
 - 5,000 IPv4 routes
 - 24 IPv6 routes (12 are from Vocus :-)
 - More Australian networks / Most International
 - MLPA
 - **Equinix - 639 Gardners Rd Mascot**
 - 6,315m² (68,000 sq ft)
 - Remote hands
 - **IPv6** Trial now !
 - Orderable Cross Connects
 - IPv4 only (at this stage)
 - 56 Participants
 - 5,617 IPv4 routes
 - More international networks / Most Australian networks
 - MLPA

A look at each IX

- **Sydney - 5gbps**



- **Equinix - 1.2Gbps**

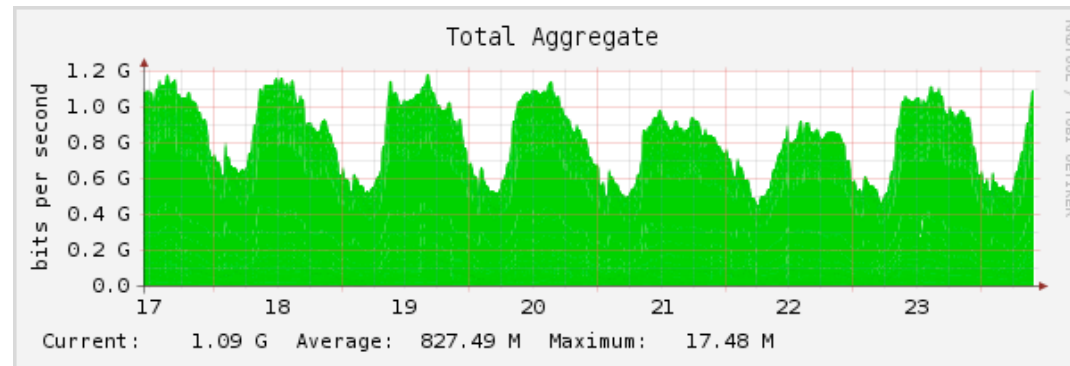


A look at each IX

- **Perth**

- **WAIX** - 250 St Georges Terrace Perth (QVI Building)

- 70 Participants - <http://www.waia.asn.au/waix/participants>
- IPv4 & IPv6
- Some remote hands
- Semi-Self Service cabling
- IX itself distributed (accessible other buildings in area)
- 5,000 IPv4 routes
- 20 IPv6 routes
- MLPA



Cost of Peering

- WAIX (Membership) AU\$500
 - FE AU\$250
 - GE AU\$350
- PIPE & Equinix are commercial (POA)

Interesting Year

- A number of International Networks Live
- A number in discussion
- Traffic increased significantly as a result
- Not all peering openly, not a requirement

Networks of Interest



Network of little Interest

TelstraTM

..... sorry David

Cost of Transit