



# Ca\$hing in on caching – an old approach reborn at UNSW

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## Agenda

- So, what's the problem?
- Solutions
- Lessons Learnt
- Now, what's next?

# So, what's the problem?

With \$60,000 per month what connectivity would be available between New York and London?

- a) 50,000Mbps capacity/ \$1.2 per Mbps
- b) 2,488Mbps capacity/ \$24.1 per Mbps
- c) 320Mbps capacity/ \$193.5 per Mbps
- d) Enough for World of Warcraft

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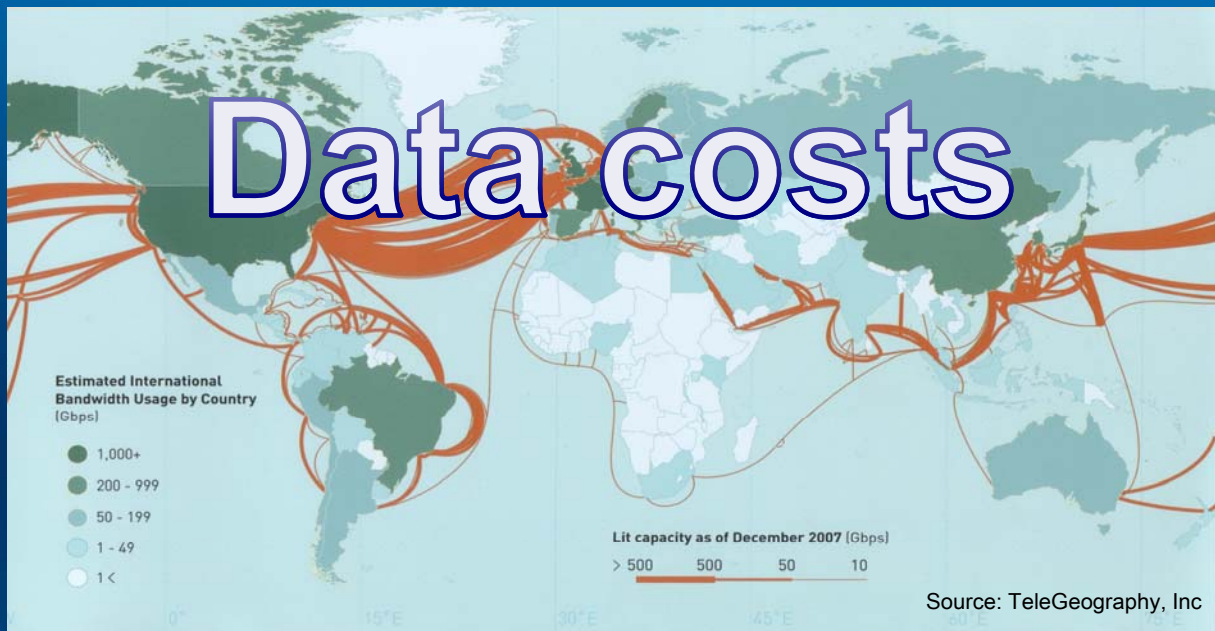
- a) 50,000Mbps capacity/ \$1.2 per Mbps
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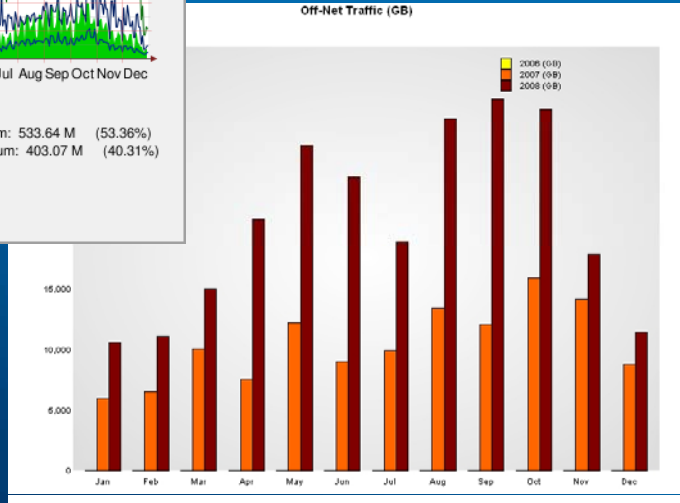
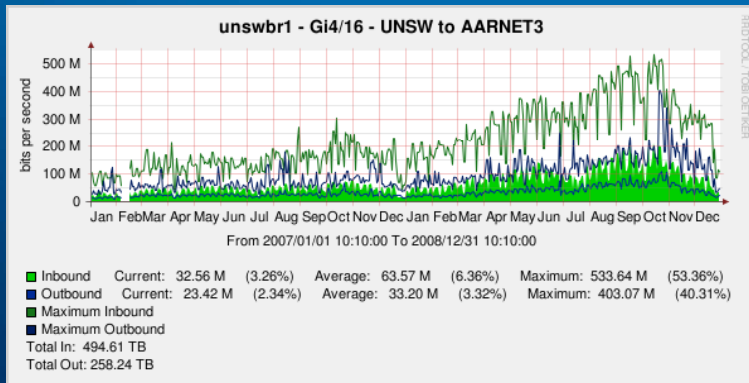
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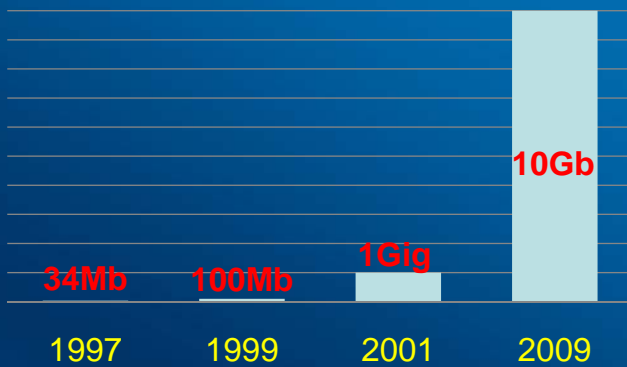
- UNSW Centralised traffic costs in 2007
- Significant wireless growth in 2008 including:
  - 300% increase in base stations
  - 1500% increase in concurrent users
- Bandwidth capacity far exceeds usage
- Cisco CE-590 Cache engines outdated and with no like for like replacement at the time

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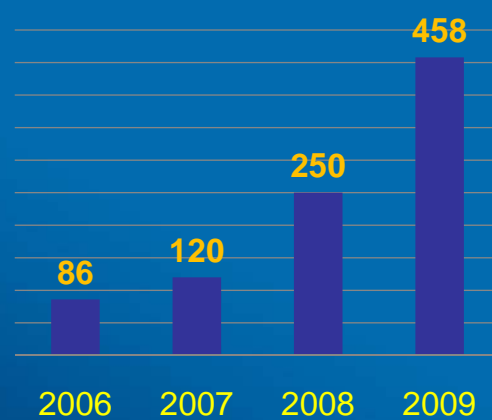


# So, what's the problem?

## UNSW Internet Connectivity



## UNSW Downloads in TB's



# So, what's the problem?

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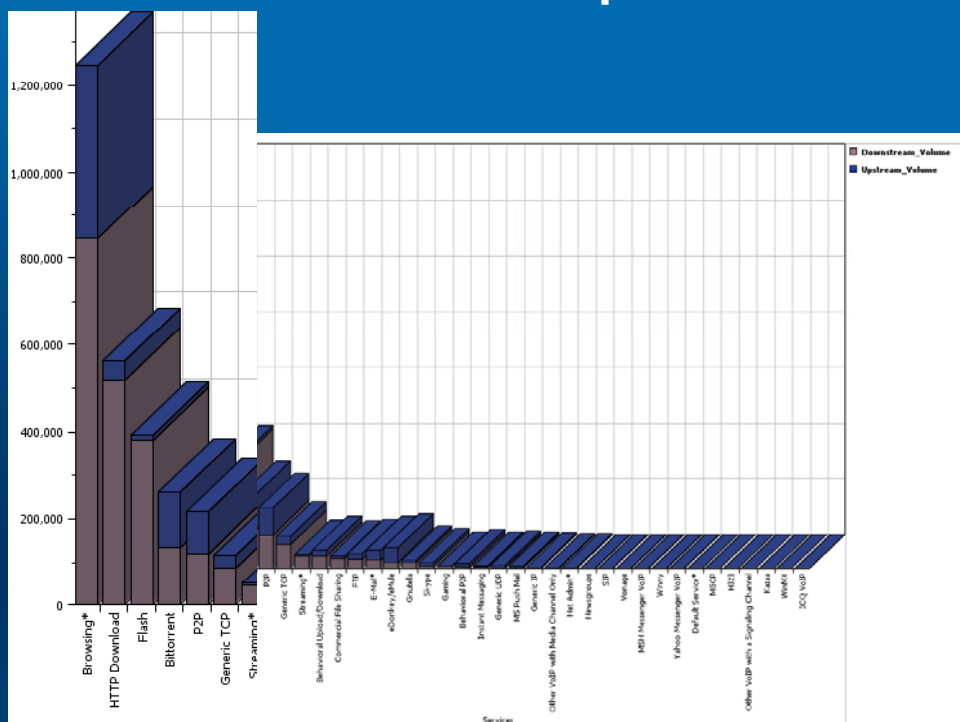
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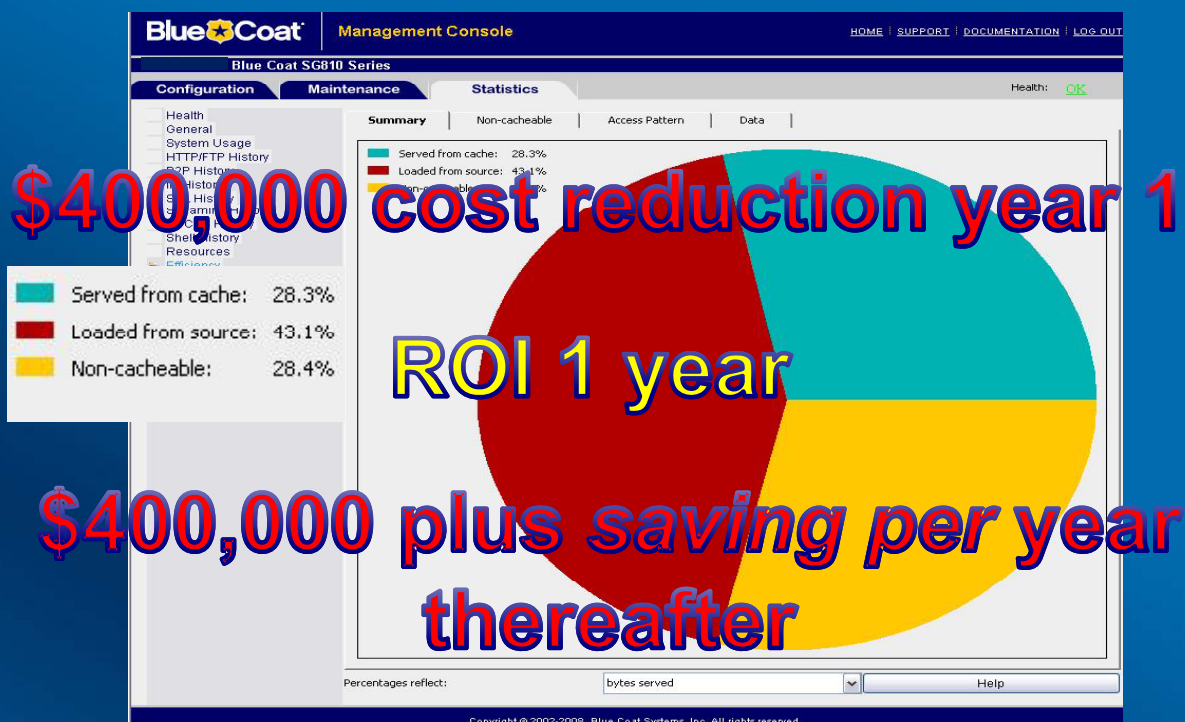
## The Solution

- Reviewed Cisco offering, Squid proxy and other vendors – no Enterprise solution
- Discovered BlueCoat at QUESTnet 2008
- Short period for implementation with initial deployment limited in scope to Internet traffic caching
- Training and certification available

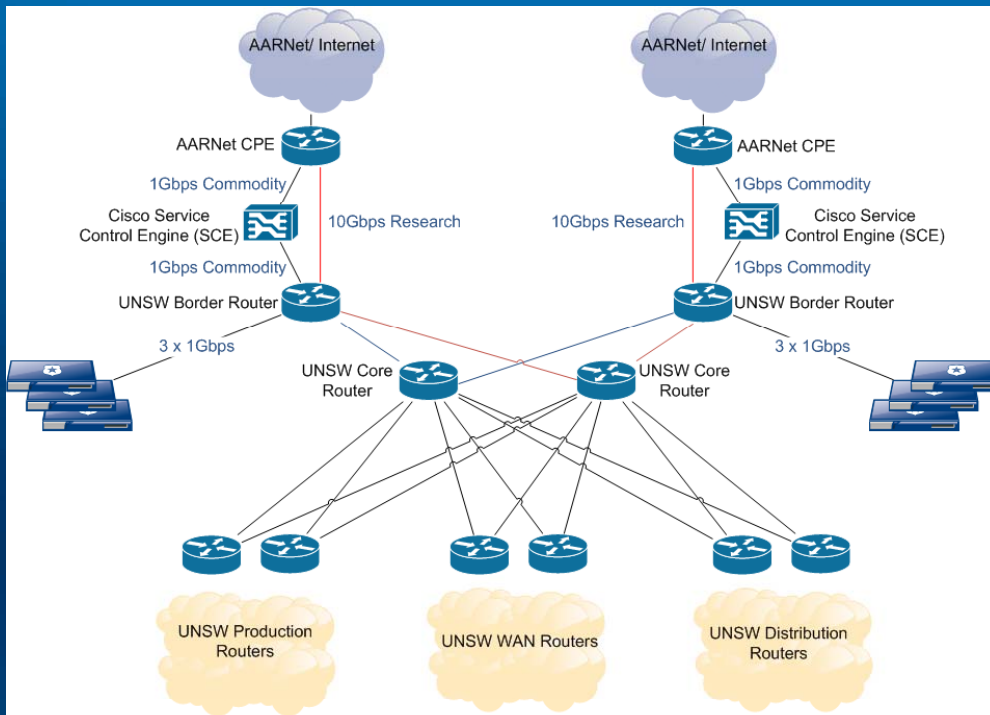
# The Solution

- Business case stood on just caching – without advanced features including streaming, quota management or peer to peer
- Ease of management, appliance device, small form factor, performance, feature rich and works “out of the box”
- Splash page / web site blocking deployed

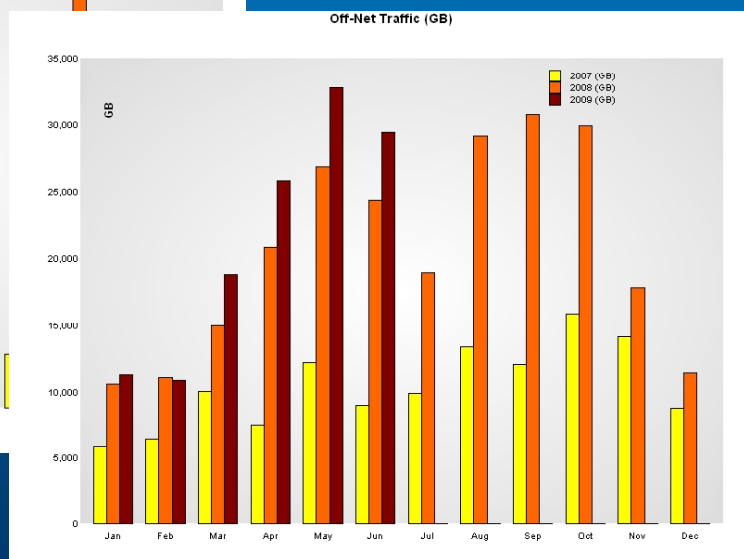
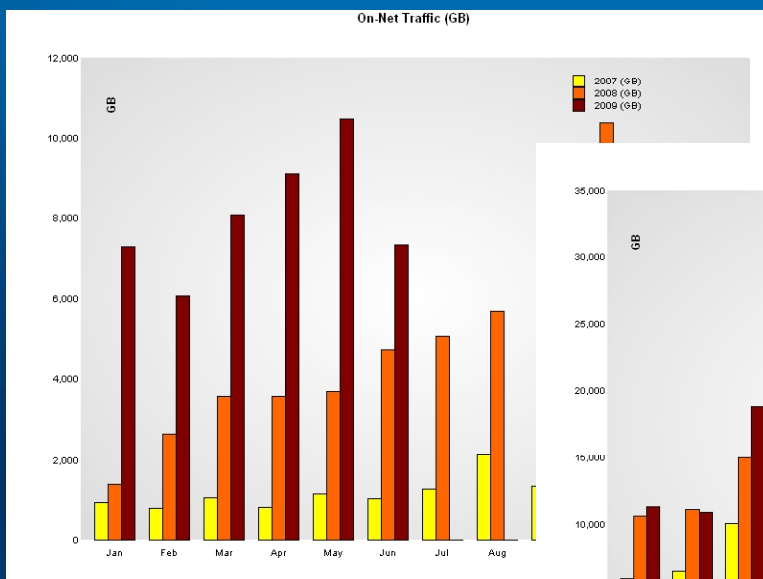
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# Lessons Learnt

- Many ways to implement – a very flexible product
- Miracles can happen – from no product to implemented, flexible product with staff training completed in 4 months
- Transparent proxy and interaction with WCCP
- Watch out for a massive fall in Aussie dollar – even in such a short period

# And the world changed...

- No AARnet excess traffic charges for 2009
- Fixed pipe will not be offered
- Long term subscription fee
- Have we just blown UNSW's investment?

# The Future

- Modify implementation to utilise Load Balancer (Cisco Content Services Module) to utilise transparent proxy
- Quota implementation
- Proxy services (Implementing Q3 09)
- Report to management how much money we save them as often as possible

# Thank you for your time

You won't get it back – but I hope you found it of value...

