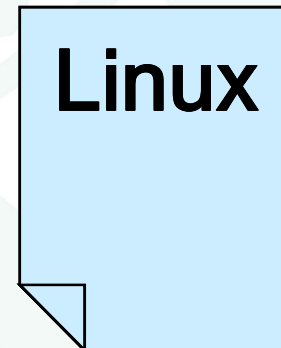
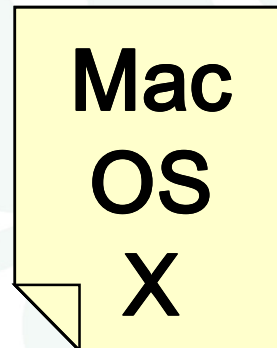
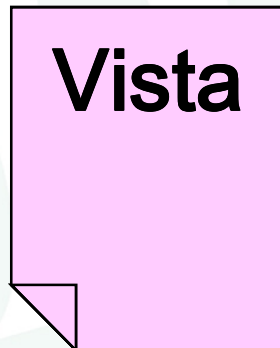
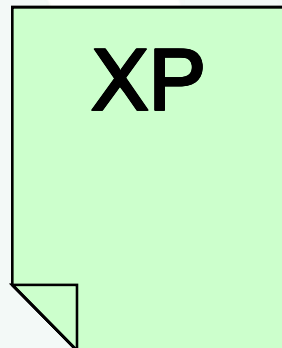


Ready to connect to the IPv6 network?

- Please pick up an instruction sheet suitable for your OS:
 - At the meeting room entrance
 - At the Helpdesk
 - From APNIC staff on the floor



IPv6: Does it work for you?

Ready, set, go IPv6!

APNIC 26

27th August 2008 (Wed)

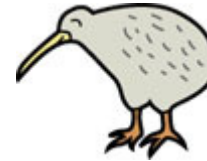
9:00 – 10:30

Christchurch, New Zealand

This material is available from:

<http://www.apnic.net/meetings/26/program/ipv6/>

Are you an IPv4 sheep or an IPv6 kiwi?



- Hope we can see as many as kiwis hopping around:
 - <http://www.apnic.net/meetings/26/ipv6/v6kiwi/>
- The value of this experiment:
 - Everyone attempts IPv6 connectivity
 - Enjoy the experiment
 - And share knowledge and information

Overview

- We will experiment with IPv6 only wireless networks between 9:00 – 10:30am
 - How to enter the IPv6 prize draw
 - APNIC 26 network infrastructure
 - Previous experiment experiences
 - Current APNIC IPv6 connectivity

This session proudly brought to you by

- Hurricane Electric
 - Thank you for your great sponsorship!
 - IPv4 EXHAUSTION CLOCK
- When you connect to the IPv6 network please raise your hand
 - APNIC staff will come around to confirm your IPv6 address and then an IPv4 address exhaustion clock is yours!

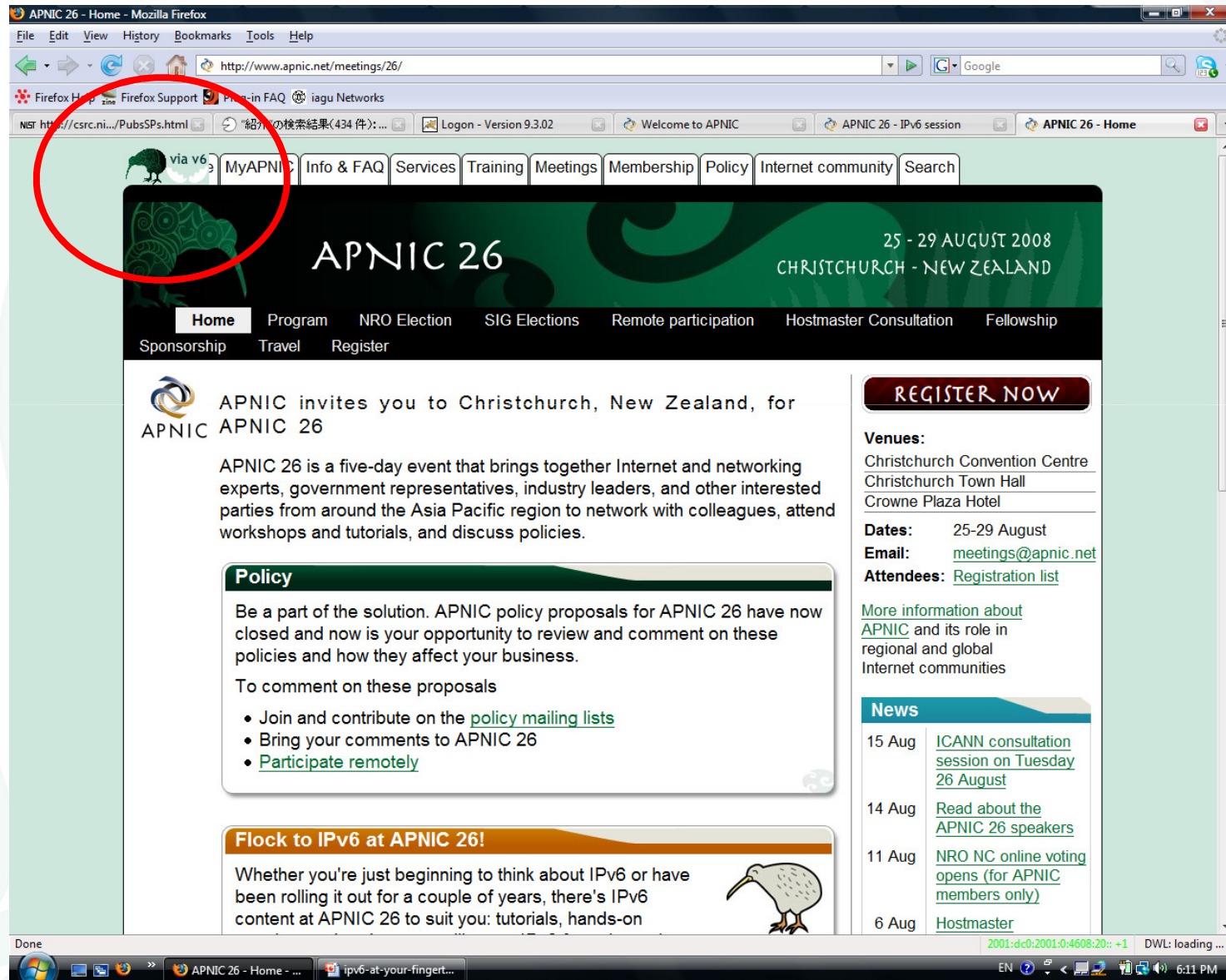


How to confirm your connectivity to the IPv6 network? www.apnic.net

The screenshot shows the APNIC website in a Mozilla Firefox browser. The address bar displays `http://www.apnic.net/`. A red circle highlights the text "Your IP: 2001:dc0:2001:6:b496:2075:c6b0:eed3" in the top left corner, indicating that the user is connected to the IPv6 network. The website content includes a navigation menu on the left, a main header with the APNIC logo and tagline "Addressing the challenge of responsible Internet resource distribution in the Asia Pacific region", and several content blocks such as "Whois search", "News", "Popular links", "Policy", "Research & analysis", "Training", and "Internet community". The status bar at the bottom shows the IP address `2001:dc0:2001:0:4608:20::+1` and the time `6:09 PM`.

How to confirm your connectivity to the IPv6 network?

<http://www.apnic.net/meetings/26/program/ipv6/>



APNIC 26 - Home - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.apnic.net/meetings/26/


Firefox Home Firefox Support Print-in-FAQ iagu Networks

MyAPNIC via v6 Info & FAQ Services Training Meetings Membership Policy Internet community Search

APNIC 26

25 - 29 AUGUST 2008
CHRISTCHURCH - NEW ZEALAND

Home Program NRO Election SIG Elections Remote participation Hostmaster Consultation Fellowship
Sponsorship Travel Register

 APNIC invites you to Christchurch, New Zealand, for APNIC 26

APNIC 26 is a five-day event that brings together Internet and networking experts, government representatives, industry leaders, and other interested parties from around the Asia Pacific region to network with colleagues, attend workshops and tutorials, and discuss policies.

Policy


Be a part of the solution. APNIC policy proposals for APNIC 26 have now closed and now is your opportunity to review and comment on these policies and how they affect your business.

To comment on these proposals

- Join and contribute on the [policy mailing lists](#)
- Bring your comments to APNIC 26
- [Participate remotely](#)

Flock to IPv6 at APNIC 26!

Whether you're just beginning to think about IPv6 or have been rolling it out for a couple of years, there's IPv6 content at APNIC 26 to suit you: tutorials, hands-on



REGISTER NOW

Venues:
Christchurch Convention Centre
Christchurch Town Hall
Crowne Plaza Hotel

Dates: 25-29 August
Email: meetings@apnic.net
Attendees: [Registration list](#)

[More information about APNIC](#) and its role in regional and global Internet communities

News

| | |
|--------|---|
| 15 Aug | ICANN consultation session on Tuesday 26 August |
| 14 Aug | Read about the APNIC 26 speakers |
| 11 Aug | NRO NC online voting opens (for APNIC members only) |
| 6 Aug | Hostmaster |

Done

2001:dc0:2001:0:4608:20::+1 DWL: loading ...

EN 6:11 PM



How to enter the IPv6 prize draw

- The prize:
 - Two Apple Airport SoHo IPv6 Wireless Routers
- When you successfully connect to the IPv6 network, you can enter the IPv6 prize draw
- What you need to do:
 - www.apnic.net/meetings/26/ipv6/
 - Click the image or the link **before 10:20**
 - Staff from RIRs, IANA, ICANN, NRO, ASO, ISOC and speakers: Please refrain from entering the lucky draw. Thank you for your understanding.
- Winners will be chosen before the morning tea
- Big thanks to Hurricane Electric!



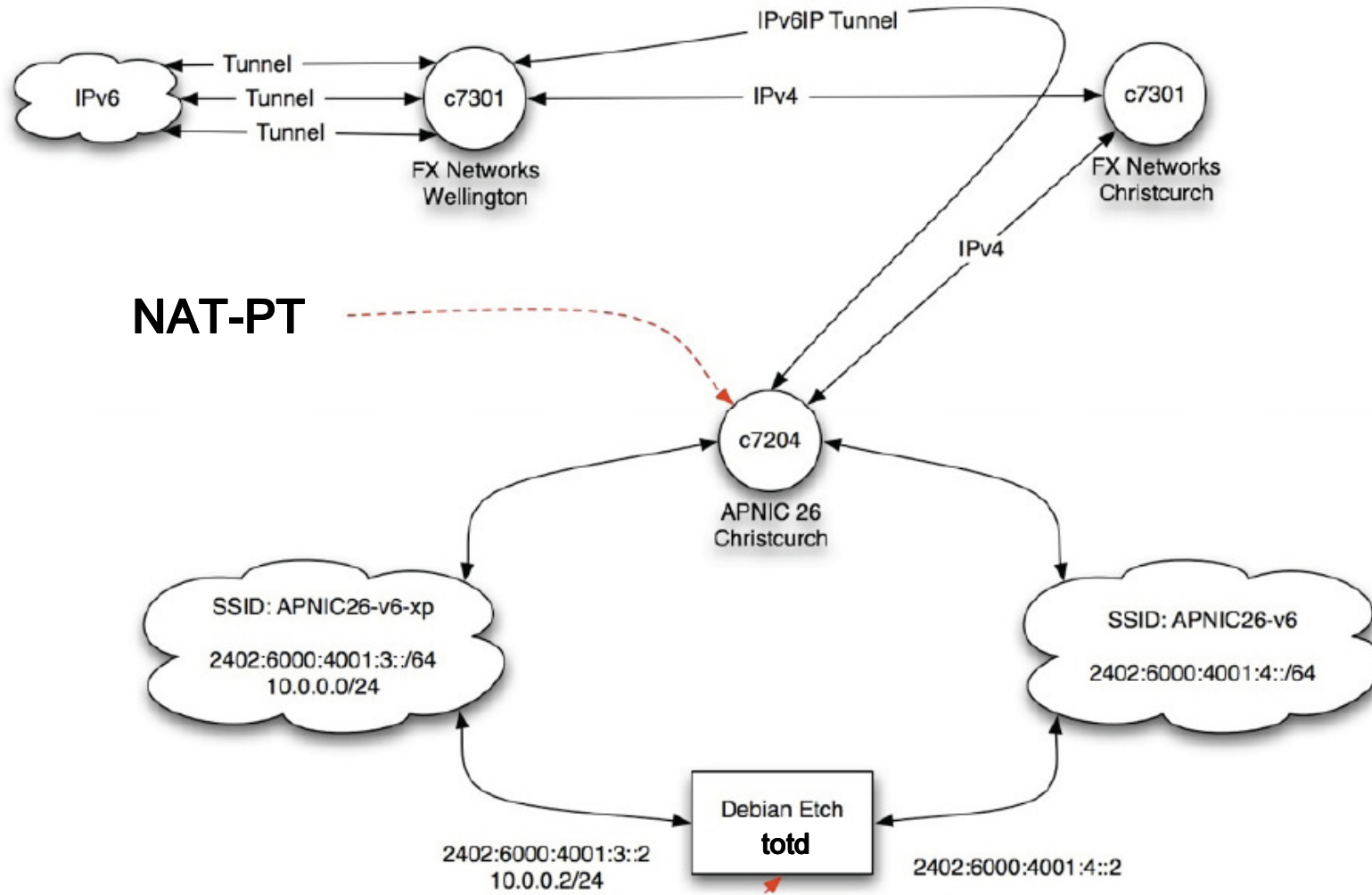
APNIC 26 network infrastructure

- Two IPv6 networks
 - SSID: **APNIC26-v6** (First 30 min after the dual-stack network is turned off)
 - IPv6 only
 - 2402:6000:4001:4::/64
 - DHCPv6
 - SSID: **APNIC26-v6-xp** (Next 30 min)
 - IPv6 + IPv4 glue for XP users
 - Since Windows XP doesn't do DNS over IPv6, this network has local RFC1918 IPv4 address space providing an IPv4 transport to a local DNS server
 - 2402:6000:4001:3::/64
 - 10.0.0.0/24
 - DHCPv6
 - DHCP (IPv4)
- IPv4/IPv6 dual stack network
 - SSID: APNIC26

APNIC 26 network infrastructure

- Applied transition mechanism
 - NAT-PT
 - Network Address Translation – Protocol Translation
 - RFC2766
 - Cisco IOS 12.4 (15) T6 “Advanced IP Services”
 - IPv4 sites see all traffic originating from 131.203.61.0/24
 - DNS ALG
 - DNS Application Layer Gateway
 - Generates AAAA records for those DNS entries which have only A records
 - Appends the HEX equivalent IPv4 address to a set range, in this case 2402:6000:4001:FFFF::/96
 - totd software

APNIC 26 network diagram



DNS ALG

If you need help...

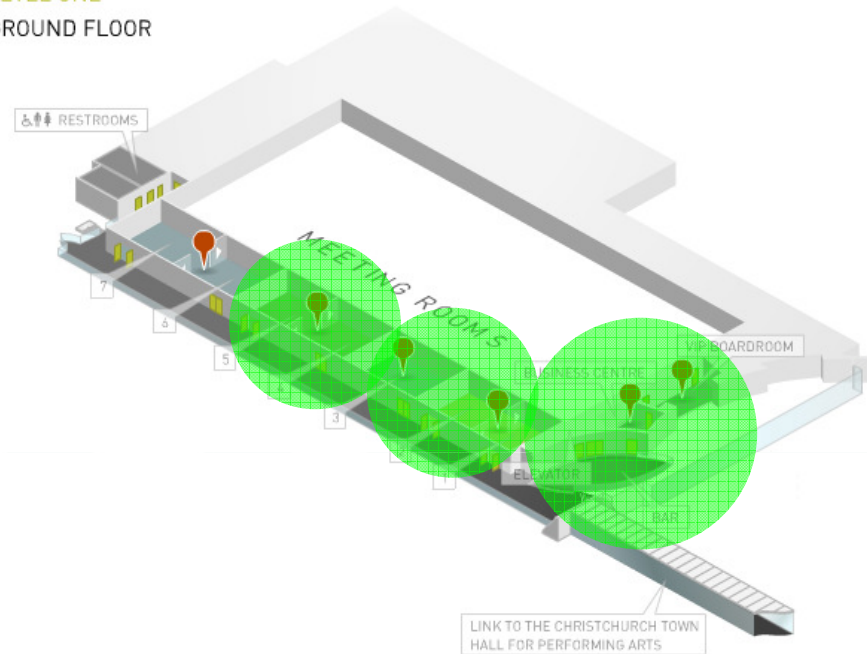
- Please see the following materials for additional explanation:
 - Hands-on information:
 - <http://www.apnic.net/meetings/26/program/ipv6/>
 - IPv6 experiment theoretical information:
 - <http://www.apnic.net/meetings/26/program/ipv6/>
 - Additional information available from:
 - <http://www.civil-tongue.net/6and4/wiki/HistoricalData>
- APNIC staff are on the floor to assist you
 - Please raise your hand for further assistance

In case you need to access to the IPv4 network...

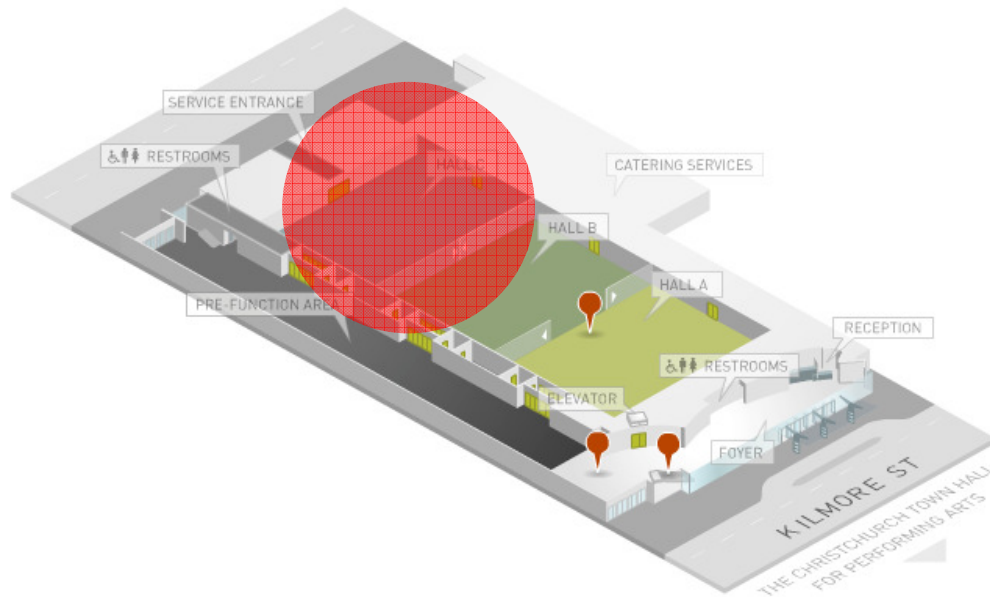
**Main Conference room
'APNIC26' dual stack SSID
being turned OFF!**

**Other areas
'APNIC26' dual stack SSID
being left on**

▲ LEVEL ONE
▼ GROUND FLOOR



▲ LEVEL ONE
▼ GROUND FLOOR



Big thanks to...

- Jonny Martin and Neil Fenemor

FXnetworks

- For preparing the “IPv6 hour” network infrastructure

IPv4 switch-off

- The IPv4/IPv6 dual stack wireless network (SSID = APNIC26) will be switched off within Hall C now.
- APNIC26-v6: First 30 min
- APNIC26-v6-xp: Next 30 min
- The IPv4/IPv6 dual stack wireless network will be turned back on at the end of the morning tea break.

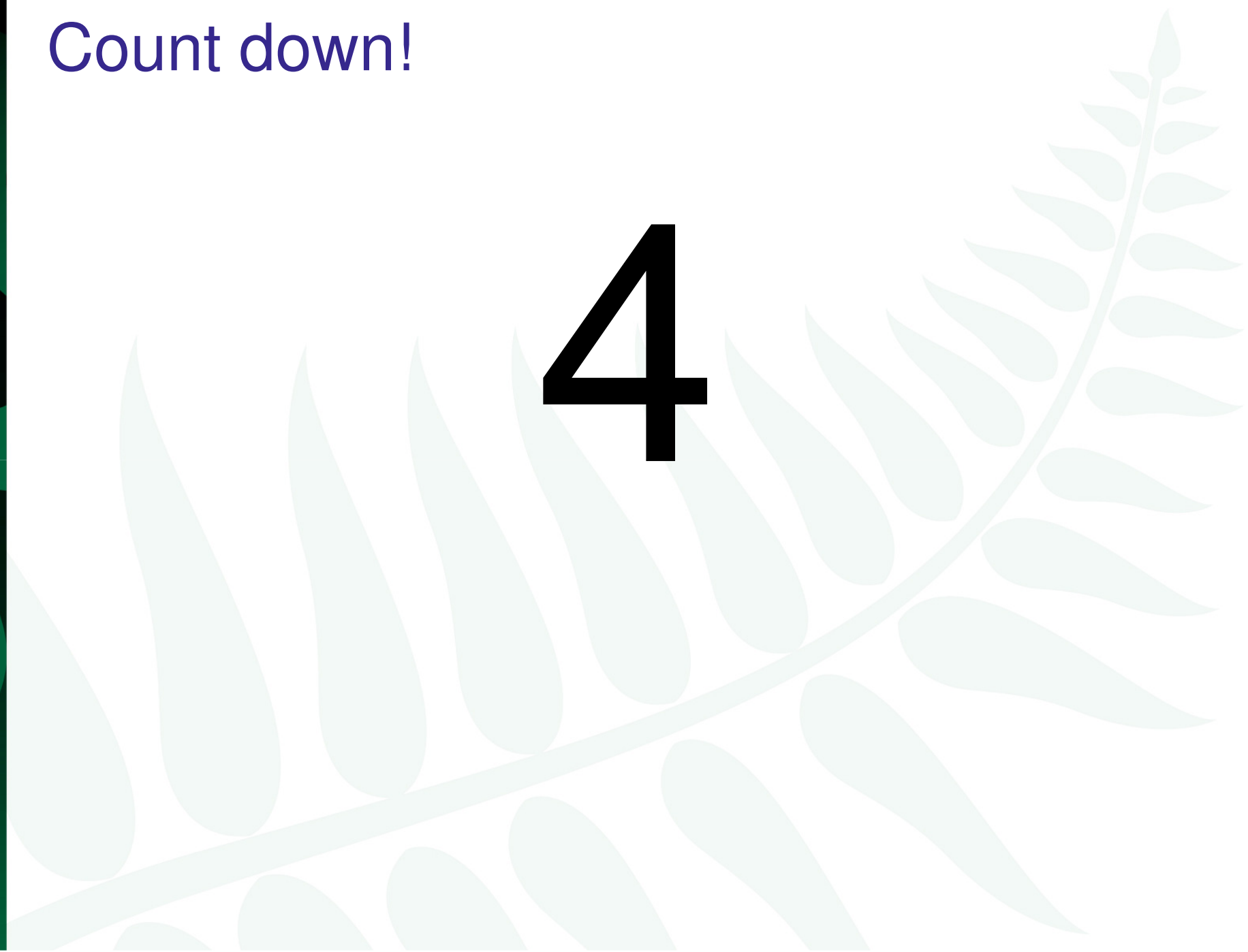
Count down!

5



Count down!

4



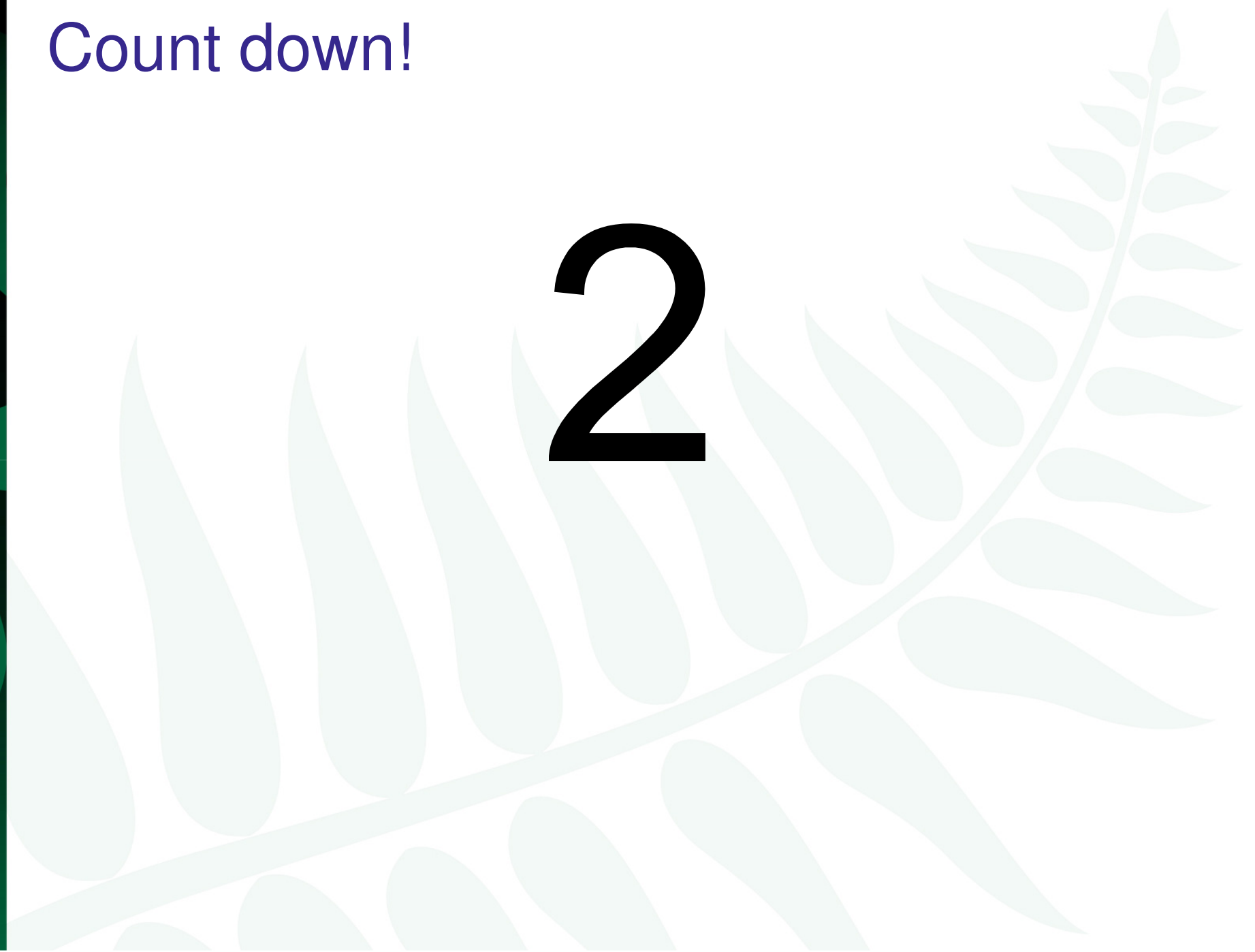
Count down!

3



Count down!

2



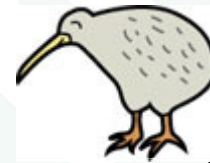
Count down!

1

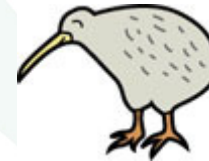
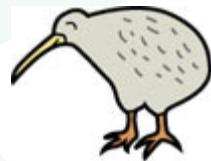
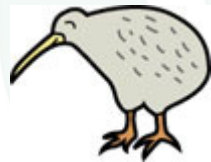




IPv4



Switch off

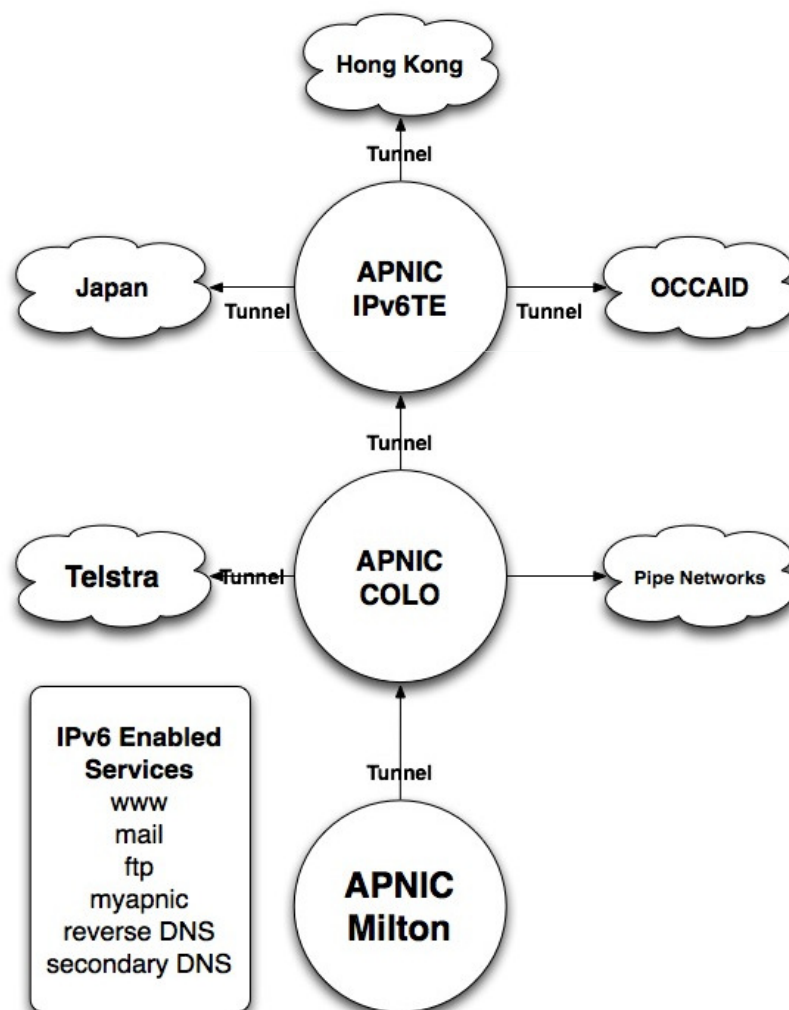


Previous experiment experiences

- NANOG Feb 2008
 - NAT-PT teething problems
- APRICOT Taiwan Feb 2008
 - Worked well, NAT-PT bedded in
- IETF Philadelphia Mar 2008
 - Worked well, turn-on of IPv6 google added value
- RIPE Berlin May 2008
 - Wi-fi problems during switch-over of access points caused some disruption

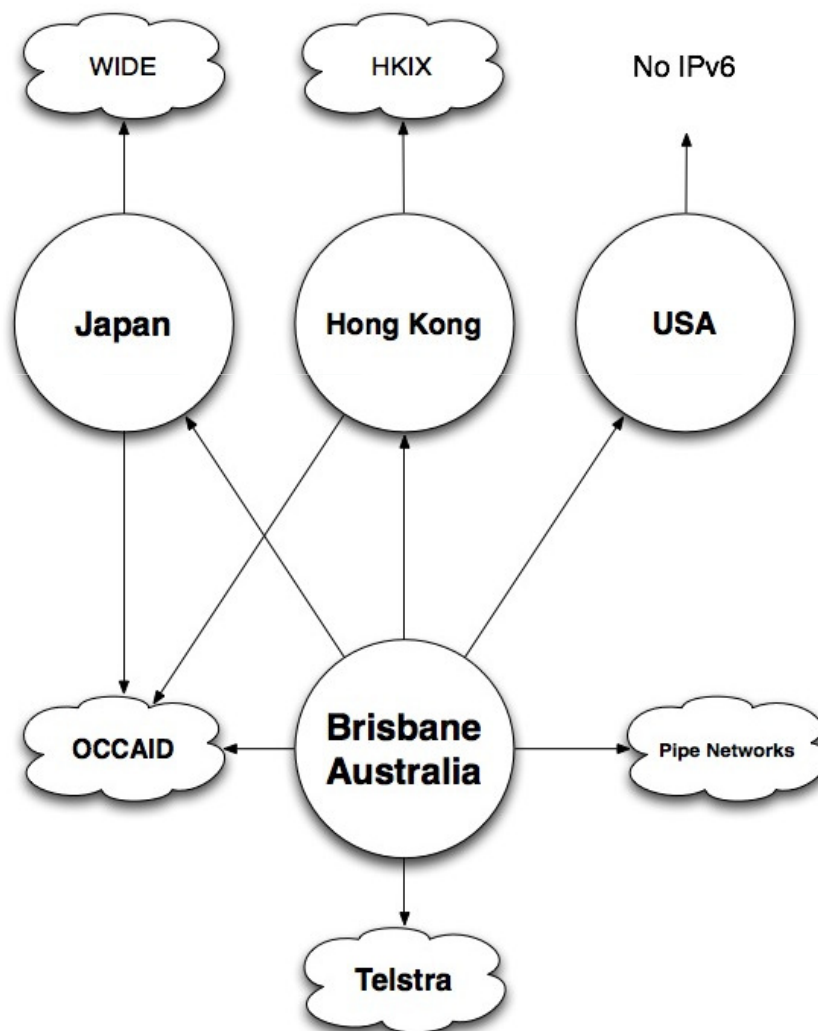
Current APNIC IPv6 connectivity

APNIC IPv6 Local Connectivity



Current APNIC IPv6 connectivity

APNIC IPv6 Connectivity



Thank you!

