

# APNIC Update

Elly Tawhai

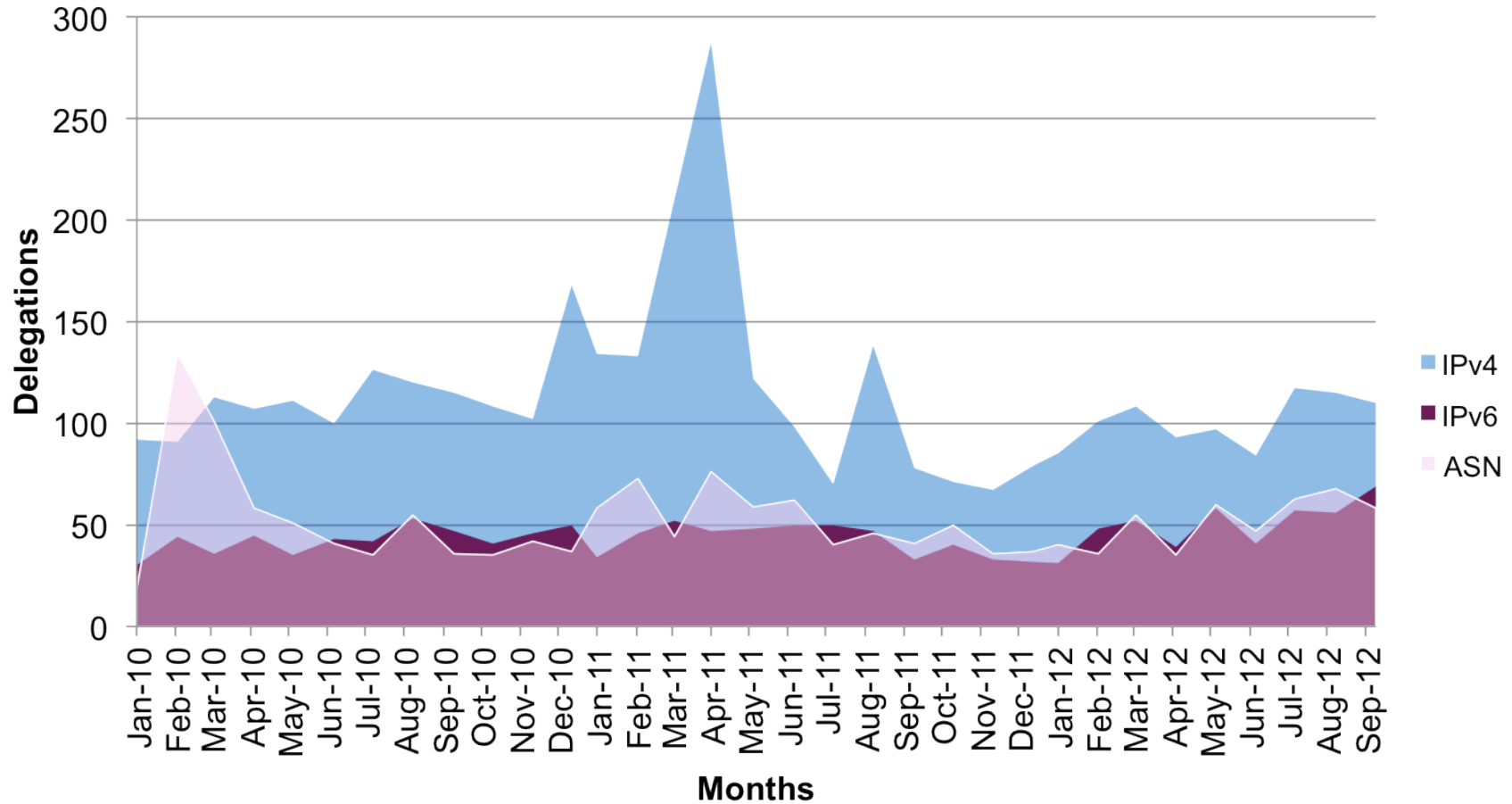
Senior Internet Resource Analyst/Liaison Officer, Pacific,  
APNIC

NZNOG 2013 25 January 2013

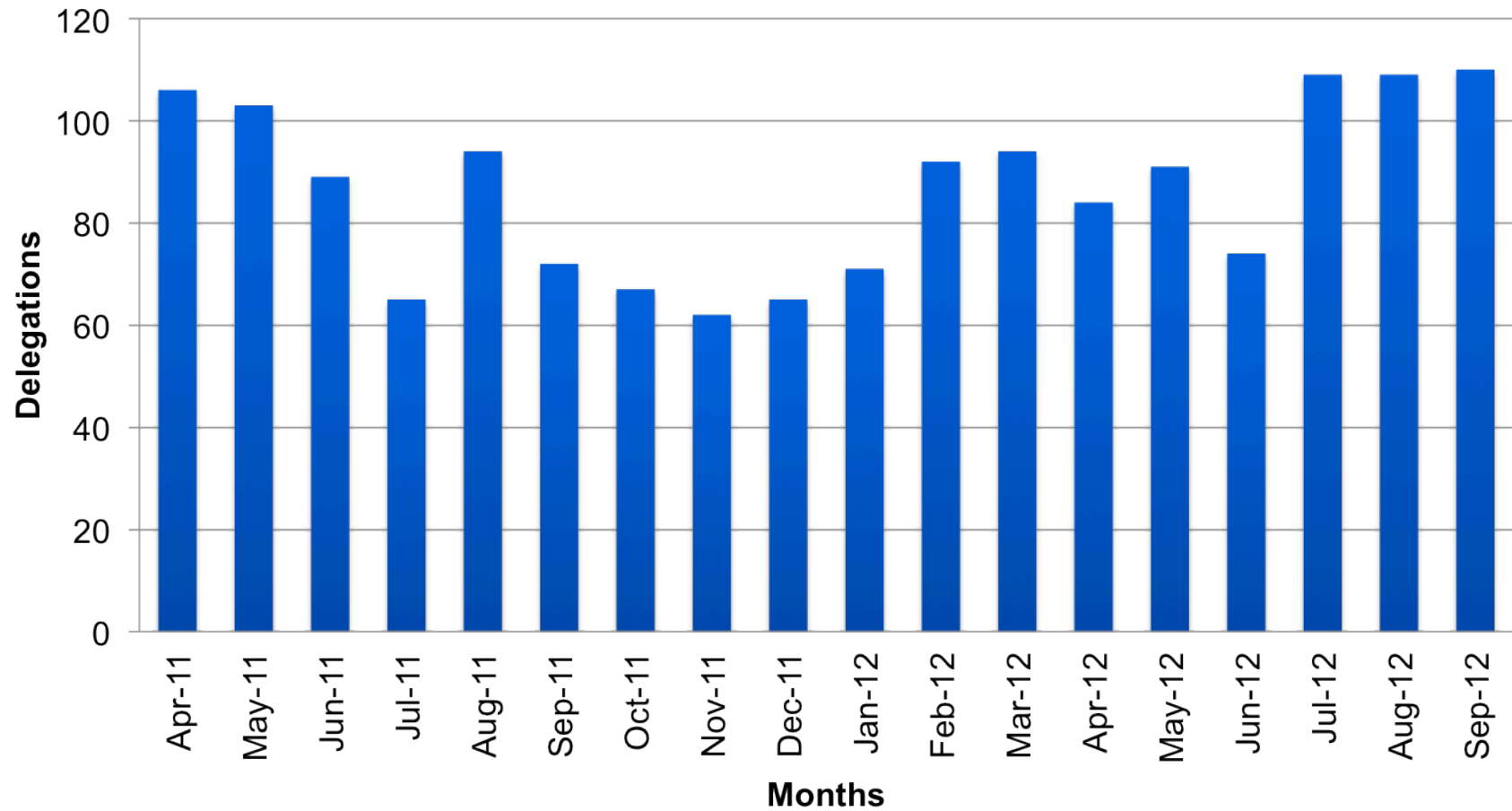
**APNIC**



# Resource Delegations



# Final /8 Delegation



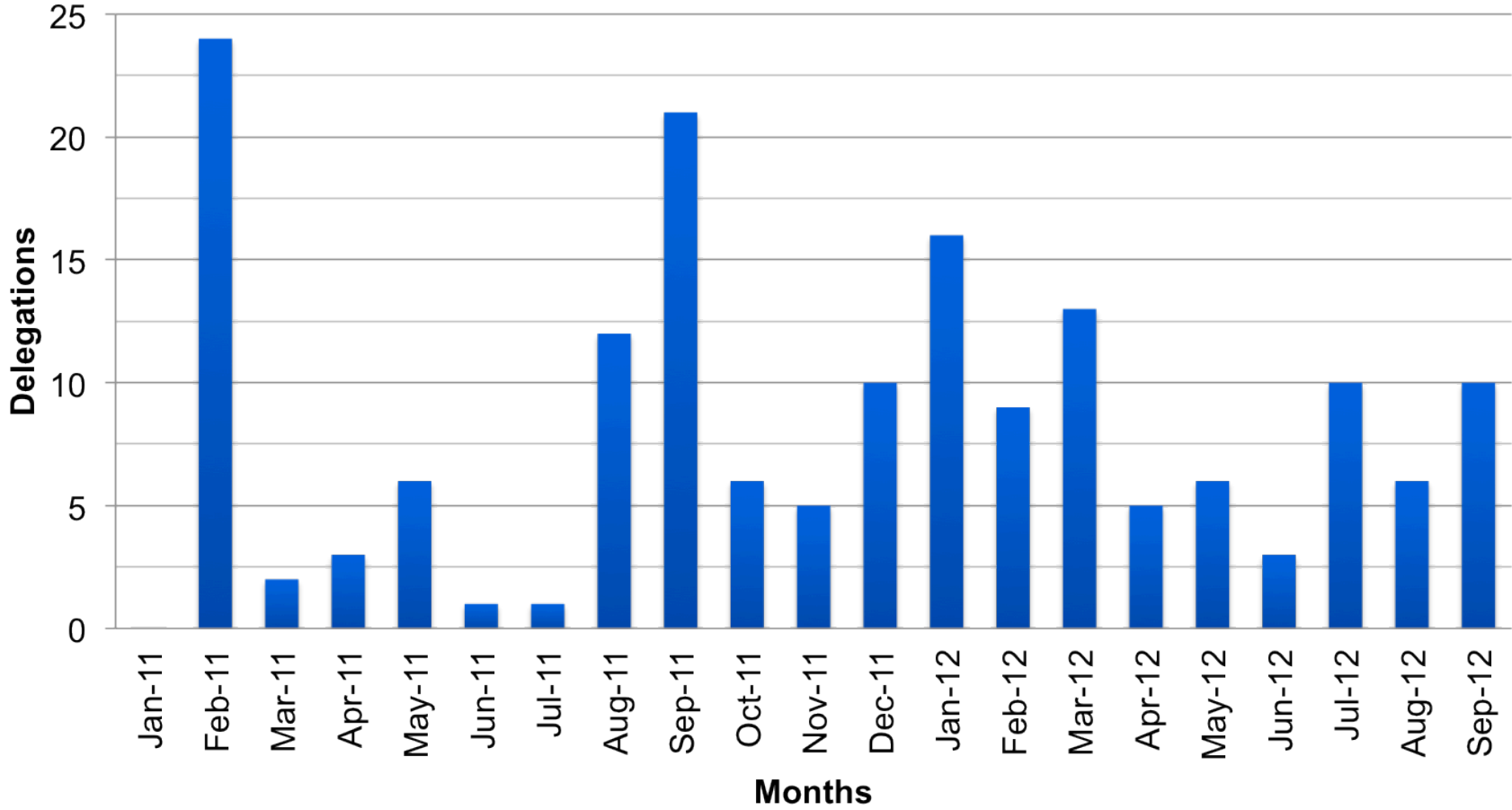
As of 30 September 2012

# IPv4 Transfers

- Inter-RIR transfers now available
  - Currently between ARIN and APNIC regions
  - Transfer fee applies
  - Recipient must be able to demonstrate a need for addresses under normal APNIC allocation policies
- Agreed Inter-RIR transfer procedure by all RIRs
  - Jointly created by the respective Resource Services Managers
- IPv4 Transfers Listing Service
  - Pre-approved recipients list available
  - Opt-in anonymous listing
  - Source can contact recipient before a transfer is initiated

[www.apnic.net/transfer](http://www.apnic.net/transfer)

# IPv4 Transfers

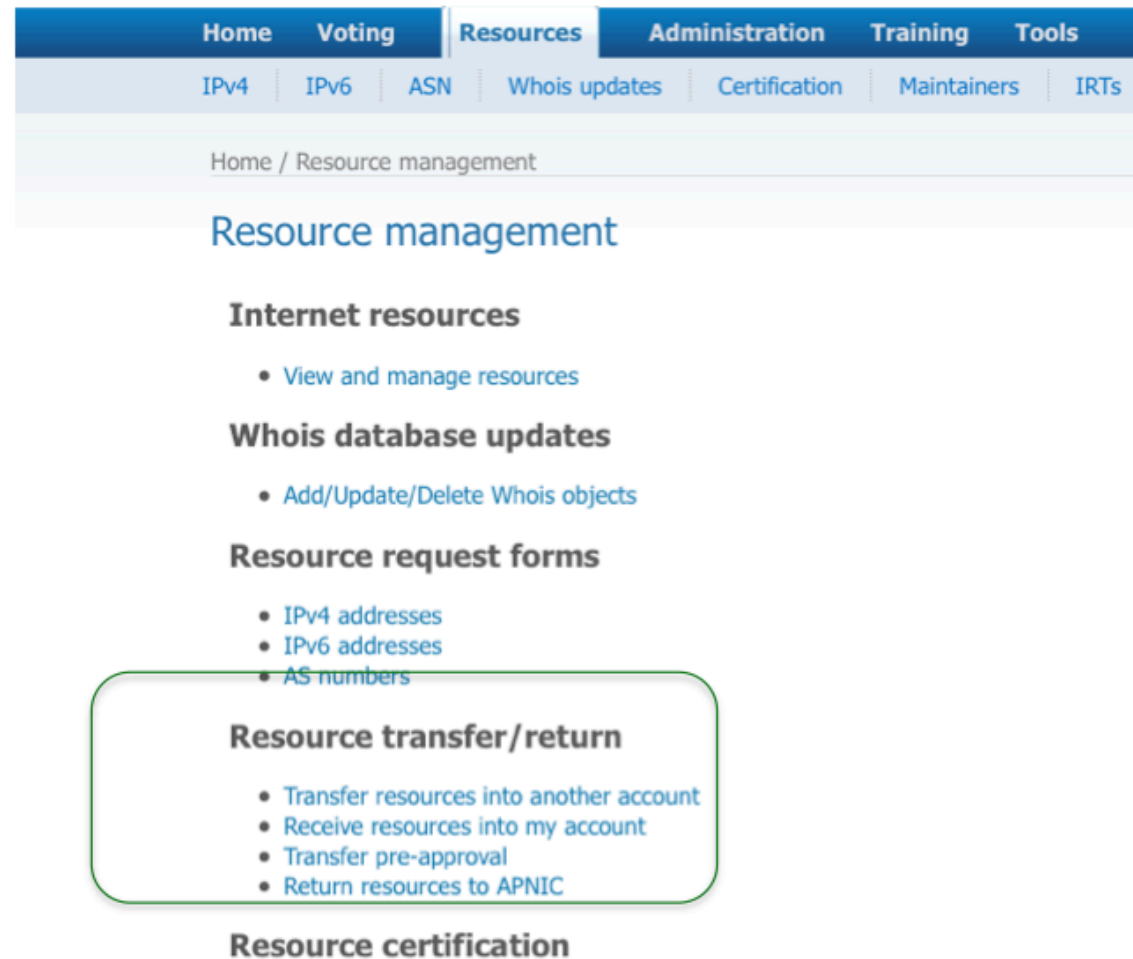


As of 30 September 2012

# Inter-RIR Transfer Summary

- Submit pre-approval request via MyAPNIC for evaluation
- Consider using APNIC IPv4 Transfer Listing Service after receipt of approval
  - <http://www.apnic.net/pre-approval-listing>
- Locate and reach agreement with source of IPv4 addresses outside of AP region
- Source initiates IPv4 transfer via respective RIR
  - Additional info: <http://www.apnic.net/transfer>

# Supporting IPv4 Transfers



The screenshot shows the APNIC website's 'Resource management' page. The navigation bar includes 'Home', 'Voting', 'Resources', 'Administration', 'Training', and 'Tools'. The 'Resources' section is active, with sub-links for 'IPv4', 'IPv6', 'ASN', 'Whois updates', 'Certification', 'Maintainers', and 'IRTs'. The breadcrumb trail is 'Home / Resource management'. The main heading is 'Resource management'. Below it are several sections:

- Internet resources**
  - [View and manage resources](#)
- Whois database updates**
  - [Add/Update/Delete Whois objects](#)
- Resource request forms**
  - [IPv4 addresses](#)
  - [IPv6 addresses](#)
  - [AS numbers](#)
- Resource transfer/return**
  - [Transfer resources into another account](#)
  - [Receive resources into my account](#)
  - [Transfer pre-approval](#)
  - [Return resources to APNIC](#)
- Resource certification**

# IPv4 Pre-approval

Home Resources Administration Training Tools

IPv4 IPv6 ASN Whois updates Maintainers IRTs Correspondence Sub-accounts

Home / Resource management / Transfer pre-approval

## Transfer pre-approval

Your account already has a valid pre-approval:

- Approval date: 2011-11-20
- Expiry date: 2012-11-20
- Prefixes available: /17, /18, /19 and /20

Only complete this form if your IPv4 requirements have changed.

Next



# APNIC Policies in 2012

- Implemented:
  - prop-102: Sparse allocation guidelines for IPv6 resource allocations
  - Implemented 20 August 2012
- Withdrawn by author:
  - prop-099: IPv6 reservation for large networks
- Abandoned:
  - prop-098: Optimizing IPv6 allocation strategies (simplified)
- Reached consensus at APNIC 34:
  - prop-101: Removing multihoming requirement for IPv6 portable assignments
  - Prop-104: Clarifying demonstrated needs requirement in IPv4 transfer policy
  - Endorsed by EC
- Withdrawn by author at APNIC 34:
  - prop-103: A final IP address policy

# Training

- Continuing focus on IPv6 deployment
  - Comprehensive face-to-face and eLearning sessions
- eLearning
  - One-hour modules
  - Delivered fortnightly in three time zones
  - New schedule for 2013
- Face-to-Face
  - Extensive hand-on exercises
  - Remote Training Lab to enable participants to build and configure networks
    - Lab upgraded in 2011 to resemble topology of an ISP with multiple operation regions

[www.apnic.net/training](http://www.apnic.net/training)

# APNIC Labs

- IPv6 Capability Tracker
  - Google Analytics tracking tool to enable website operators to measure client IPv6 capabilities
- Measuring IPv6
  - Measuring the end-to-end capability of IPv6 clients per economy
  - Readiness data at end-user level for various intergovernmental organizations and economies
- IPv6 preference by AS Number
  - Measures IPv6 client capability per autonomous system
- IPv4 address report
  - Measuring IPv4 free pool address exhaustion

[www.labs.apnic.net](http://www.labs.apnic.net)

[www.blabs.apnic.net](http://www.blabs.apnic.net)

# Alternative WHOIS Protocol

- Web Extension Internet Registration Data Service (WEIRDS)
- Alternative protocol for WHOIS to address shortcomings:
  - Lack of internationalization support
  - No specification of queries, output, or error messages
  - No referral mechanism
  - No authentication mechanism
- Prototype available (json output)  
<http://weirds-pilot.apnic.net/ip/202.12.29/23>
- Easy for web developers

# Resource Public Key Infrastructure

- Published specifications as Internet RFC numbered documents this year
- Working with ICANN and the other RIRs towards a global system
- Introduced the General Purpose Signer in the RPKI BoF session at APNIC 34
- Ability for the public to run their own RPKI system inter-operating with APNIC by the end of 2012

# APNIC Survey

- Conducted by Professor Ang Peng Hwa, Singapore Internet Research Centre (SIRC) on behalf of the APNIC EC
- Received 1,333 valid responses from 67 economies
  - Valid responses were 67.9% higher than the previous Survey
- 70% of respondents reported high satisfaction vs 64% from the previous Survey

[www.apnic.net/survey](http://www.apnic.net/survey)

# APNIC Survey – Top Ten Priorities Future Planning

Priorities	Rating
Resource registration including APNIC Whois DB	5.59
Root server deployment in the region	5.49
Reverse DNS services	5.48
Internet community support	5.38
Training services	5.37
Research activities	5.32
Internet numbers resource transfers	5.25
Policy development facilitation	5.23
Internet number statistics	5.19
Secondary DNS services	5.17

Ratings from 1 to 7

# Upcoming Conferences

- APNIC 35, Singapore
  - 20 February to 1 March 2013 (with APRICOT 2013)



- APNIC 36, Xi'an, China
  - 20 to 30 August 2013
  - All invited!!!



# Thanks

Elly Tawhai

[elly@apnic.net](mailto:elly@apnic.net)

**APNIC**

