



APNIC Activity Highlights

NZNOG'11

28 January 2011

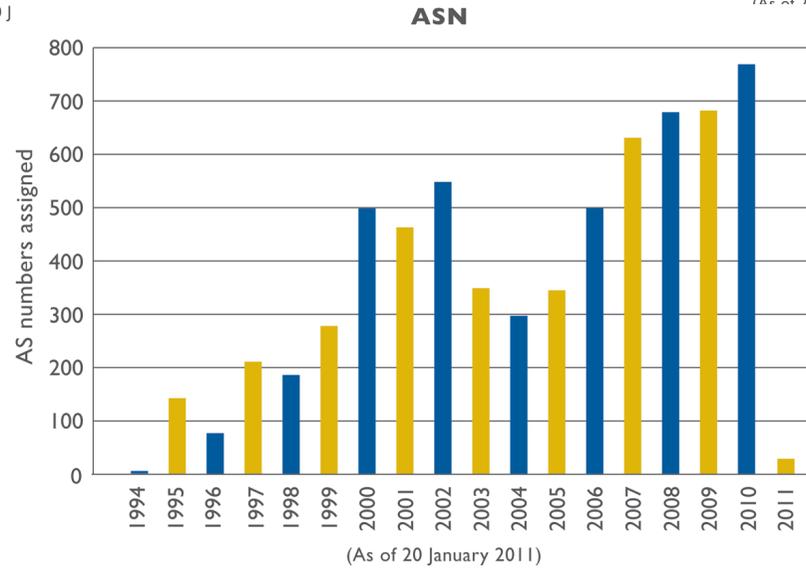
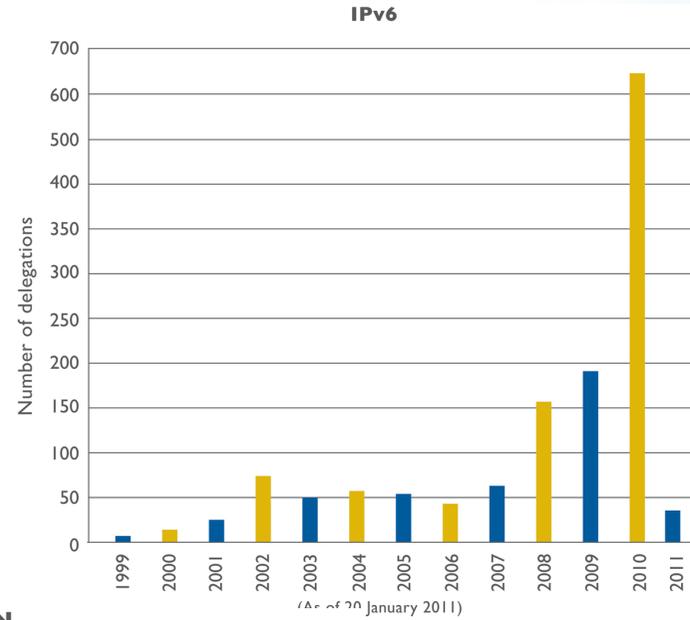
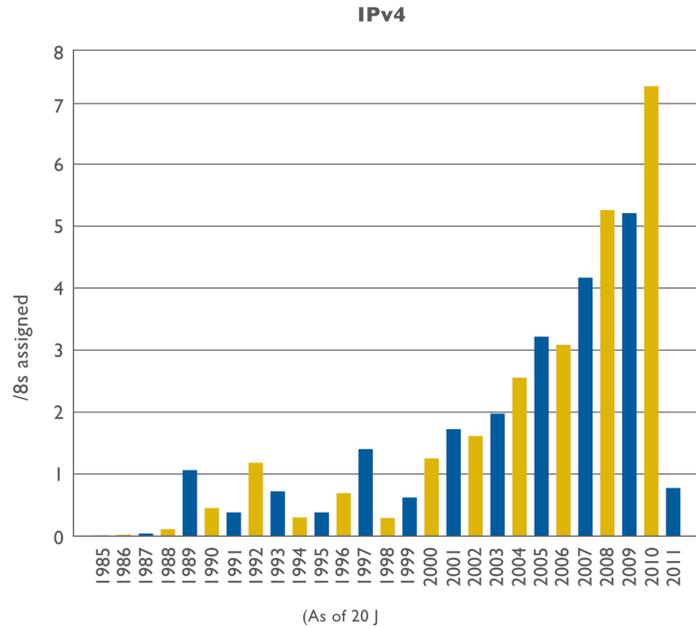
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Overview

- Services update
- APNIC policy updates
- APNIC activities
 - R&D
 - Technical Developments
 - IPv6 Program
 - Training
- Other news
- Upcoming Meetings

Resource Delegations



Resource Services

- IPv4 requests still strong
 - Mobile, wireless, ADSL networks
 - Growth economies: CN, KR, JP, IN, VN
- Very high IPv6 take up
 - 541 delegations in 2010 so far (188 in 2009)
- Resource Quality Assurance
 - APNIC tests all IANA allocations prior to distribution
 - 49.0.0.0/8 and 101.0.0.0/8 tested and deployed
 - Have been tested 36.0.0.0/8 and 42.0.0.0/8

Resource Services

- Less than 2 percent of IPv4 addresses remain in IANA freepool
- From 1 April 2011
 - All IPv4 requests will be evaluated within team
 - There will be a 5 business day turnaround
 - Process continue until final /8 reached then maximum IPv4 allocation size of /22
- Stay tuned further details to be provided at APNIC 31

Resource Quality Assurance

Testing for new /8 blocks

- NOC mailing lists notification
- Collaborative testing conducted by APNIC R&D in conjunction with different organizations
- APNIC conducts further testing, to quantify the extent to which networks attract “pollution” or “unwanted” traffic



Resource Quality Assurance

Community awareness

- Promote responsible administrative practices through APNIC publications and training materials
- Inform organizations maintaining bogon/black lists about recently allocated addresses
 - In order to update their Database
- Maintain accurate Whois Database
 - Actively remind resource holders to update data

Resource Quality Assurance

Is a collaborative effort, you can:

- Follow responsible network administration practices to protect users from abuse and security attacks, while allowing legitimate traffic to flow and reach its intended destination
- Talk to your customers, upstreams and peers
- Keep informed about IANA allocations
- Consider whether you should stop any form of bogon filtering

Member Services

- **Membership** total: 2,428
- New Members in 2010: 332
- Total MyAPNIC users: 3,180
- Top 5 Helpdesk service requests in the last 6 months:
 - Reverse DNS registration
 - How to make assignment records
 - Whois record updates
 - MyAPNIC access
 - Contact person changes

APNIC Policy Updates

Proposal	Title	Overview
Prop-079 Implemented 8 Nov 2010	Abuse contact information	This is a proposal to introduce a mandatory abuse contact field for objects in the APNIC Whois Database to provide a more efficient way for abuse reports to reach the correct network contact.
Prop-080 Implemented 5 July 2010	Removal of IPv4 prefix exchange policy	This is a proposal to remove the policy that currently permits resource holders to return three or more noncontiguous IPv4 address blocks and have the prefixes replaced with a single, larger, contiguous block.
Prop-082 Implemented 5 July 2010	Removing aggregation criteria for IPv6 initial allocations	This is a proposal to remove the aggregation requirement from the IPv6 initial allocation policy.

No policy proposals reached consensus during APNIC 30

<http://www.apnic.net/policy/proposals>

What Does Prop-079 Mean?

- APNIC Whois Database now contains 'IRT' objects
- Network operators can report network abuse to contacts registered within IRT (Incident Response Team) object
- The IRT object is mandatory and referenced within inetnum, inet6num and aut-num objects

'IRT' Object Screenshot

Home / Resource management / Add IRT object

Add IRT object

The APNIC Whois Database now requires an IRT object to be referenced by your inetnum, inet6num, and aut-num objects. Your account does not have an IRT object registered.

Please use the form below to create one.

For more information, please see: <http://www.apnic.net/irt>.

If you want to use an IRT object that already exists in whois, click [here](#) to register that object.

IRT name	*	<input type="text" value="IRT-APNIC-AP1"/>
Network abuse email	*	<input type="text"/> ?
Maintainer	*	<input type="text" value="MAINT-AU-VIVEK"/>
Address Line 1	*	<input type="text" value="Level 1 - 33 Park Rd"/>
Address Line 2		<input type="text" value="Milton QLD 4064"/>
Address Line 3		<input type="text" value="Australia"/>
Address Line 4		<input type="text" value="World"/>



Current Discussions – Need Input

Proposal	Title	Overview
prop-083 (Version 2)	Alternative criteria for subsequent IPv6 allocations	To enable current APNIC account holders with existing IPv6 allocations to receive subsequent IPv6 allocations from APNIC for use in networks that are not connected to the initial IPv6 allocation.
prop-084	Frequent whois information update	For APNIC to regularly contact all APNIC current account holders with resources in the APNIC Whois Database to ask them to actively check that all their details in whois are up to date
prop-085	Eligibility for critical infrastructure assignments	Seeks to make it possible for critical infrastructure account holders (such as new ccTLDs or gTLDs) to receive portable IPv4 assignments from the final /8 space
Prop-086	Global Policy for IPv4 allocations by IANA post exhaustion	Proposes a mechanism for the RIRs to retro allocate the recovered IPv4 address space to the IANA and provides the IANA the policy by which it can allocate it back to the RIRs on a needs basis.

<http://www.apnic.net/policy/proposals>



Current Discussions – Need Input

Proposal	Title	Overview
prop-087	IPv6 address allocation for deployment purposes	Seeks to add alternative criteria for receiving a larger than /32 initial IPv6 allocation during the initial IPv6 deployment phase (from now until 2013). Under this proposal, a network can justify if the network is using a deployment protocol described in a RFC
prop-088	Distribution of IPv4 address once the final /8 period starts	To handle any IPv4 address space received by APNIC after the final /8 policy is implemented as being part of the final /8 pool and to redistribute these resources according to the final /8 policies
prop-090	Optimizing IPv6 allocation strategies	Seeks to change how the size of IPv6 allocations and end site assignments are determined, allowing more room for growth
Prop-091	Limiting of final /8 policy to specific /9	Suggests splitting the final /8 into 2 parts: a /9 worth to be distributed according to the final /8 allocation criteria. The other /9 worth to be allocated according to pre-final /8 allocation policies

<http://www.apnic.net/policy/proposals>

Current Discussions – Need Input

Proposal	Title	Overview
prop-092	Distribution of additional APNIC IPv4 address ranges after IANA exhaustion	Suggests applying the final /8 allocation policies only to a defined block, and that any IPv4 address ranges APNIC receives after IANA exhaustion be distributed according to pre-exhaustion policies
prop-093	Reducing the minimum delegation size for the final /8 policy	Seeks to change minimum delegation size in final /8 down to a /24, with organizations permitted to request multiple times until they have a total of /22 from final /8. Also permits assignments from final /8 by changing language from “allocation” to “delegation” (both assignment and allocation)
prop-094	Adding alternative criteria to renumbering requirement in final /8 policy	Seeks to add alternative criteria for LIRs receiving an initial allocation during the final /8 phase: either renumber out of upstream address block (existing criteria) or have used at least 80% of upstream block (new alternative criteria)
Prop-095	Inter-RIR IPv4 address transfer proposal	Proposes a mechanism for APNIC account holders to conduct IPv4 transfers with organizations in other RIR regions, provided the other RIR has an inter-RIR transfer policy as well.

<http://www.apnic.net/policy/proposals>

Current Discussions – Need Input

Proposal	Title	Overview
prop-096	Maintaining demonstrated needs requirement in transfer policy after the final /8 phase	Seeks to maintain the requirement for recipients of IPv4 transfers to justify their need for address space beyond the current allocation phase and into the final /8 phase.
prop-097	Global Policy for post exhaustion IPv4 allocation mechanisms by the IANA	Proposes a method for IANA to distribute recovered IPv4 addresses to the RIRs when it has distributed all its /8s. Seeks to find a middle ground between previous attempts at this idea (prop-069 and prop-086)

<http://www.apnic.net/policy/proposals>

Research and Development

- Routing research
- RPKI (joint with other RIRs/NRO)
- DNS service dynamics
- DNSSEC implementation
- Expanded network measurement/
monitoring
 - Test Traffic Measurement (TTM)
 - ‘Day In the Life of the Internet’ (DITL)
 - 3.4Tb of data collected over 3 days in 2010

Research and Development

- IPv6 uptake measurements
 - Web metrics (collaborating with RIPE NCC)
 - DNS metrics
- Global RPKI system by 1 January 2011
 - In conjunction with the NRO ECG
 - Sharing source code and expertise with AfriNIC

Technical Developments

- New co-location facility in 'triangle architecture' for reliability and DRP
- DNSSEC running smoothly since April
- Implementing Agile software development methodologies

IPv6 Program Update

- APNIC is Secretariat for the Asia Pacific IPv6 Task Force (APIIPv6TF)
- APNIC worked closely with APEC TEL WG on two IPv6 workshops this year
 - Workshop on IPv6: Transforming the Internet, APEC TEL 41, Taipei, Taiwan
 - Workshop on IPv6: Securing sustainable growth of the Internet, APEC TEL 42, Bandar Seri Begawan, Brunei Darussalam

Training and Education

eLearning Interactive

- Successfully offering two sub-regional training courses per month:
 - 18 eLearning web classes
 - 245 attendees



Flexible
Free
Accessible



Accessible

New Building

- Lower operating costs
- Size and location suits APNIC's future needs



[Google Map Location](#)

Next APNIC Meeting

A graphic banner for APNIC 31. It features a red curved background on the left with the text 'APNIC 31' in white. To the right, there is a grey silhouette of a city skyline with a prominent skyscraper, and a black silhouette of a traditional Chinese junk boat with three red sails. The background of the entire slide is a blue sky with white clouds.

APNIC 31

21 - 25 February 2011
Hong Kong SAR, China

APNIC 31 / APRICOT-APAN 2011

February 21 – 25

Hong Kong SAR, China

<http://meetings.apnic.net/31>

Thank You

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