Overview of policy proposals

Policy SIG
Thursday 28 August 2008
Christchurch, New Zealand

IPv4 proposals under discussion

Discussion continuing from APNIC 25

- prop-050: IPv4 address transfers
- prop-055: Global policy for the allocation of the remaining IPv4 address space

New proposals

- prop-062: Use of final /8
- prop-062: Reducing timeframe of IPv4 allocations from twelve to six months
- prop-066: Ensuring efficient use of historical IPv4 resources

prop-050: IPv4 address transfers

Problems this proposal aims to address

- Current APNIC policies limit registration of transfers to resources related to mergers and acquisitions of operational networks
- There will continue to be a demand for IPv4 after the exhaustion of the unallocated address pool
- The APNIC resource registry needs to accurately reflect current address distribution information

prop-050: IPv4 address transfers

Proposed solution

- Remove APNIC policy restrictions on registrations of IPv4 transfers between current APNIC account holders.
- Address blocks transferred:
 - Must be /24 or larger
 - Must be in APNIC administered range
 - Are subject to all current APNIC policies from the time of transfer
- Source of transfer ineligible to receive IPv4 address blocks from APNIC for 24 months after transfer

prop-050: IPv4 address transfers

- Version 1 presented APNIC 24
 - No consensus sought
- Version 2 presented at APNIC 25
 - No consensus
 - Author asked to continue refining proposal
- Version 3 to be presented at APNIC 26
 - Summarizes discussion held in other RIR regions
- Discussion on mailing list (version 3):
 - 8 posts from 3 people

prop-055: Global policy for the allocation of the remaining IPv4 address space

The problem...

- Issues each RIR region will face during the exhaustion period vary by region as the level of development of IPv4 and IPv6 are widely different.
- As a result, applying a global co-ordinated policy may adequately address issues in a certain region while it may not work for the others.

prop-055: Global policy for the allocation of the remaining IPv4 address space

The solution...

- IANA reserves one /8 for each RIR now.
- Later, when IANA receives a request for IPv4 address space that cannot be fulfilled using the remaining IANA IPv4 free pool, IANA will allocate each RIR a single /8 from the reserved block.
- Any remaining /8s in the IANA free pool will then be allocated to the RIR that makes the last request to IANA.

prop-055: Global policy for the allocation of the remaining IPv4 address space

- Proposal is amalgamation of APNIC 24 proposals:
 - prop-051: Global policy for the allocation of the remaining IPv4 address space
 - prop-046: IPv4 countdown policy proposal
- Presented at APNIC 25
 - Majority support but not consensus
 - Returned to mailing list for more discussion
- Discussion on mailing list (version 2):
 - No posts

prop-062: Use of final /8

The problem...

- How should APNIC use the final /8 if prop-055 is implemented?
- How can new networks connected to a dual IPv4/IPv6
 Internet after the free pool exhaustion
- What happens if a new disruptive technology needs IPv4?

prop-062: Use of final /8

The solution...

- Reserve the final /8 in the APNIC region for three things:
 - Each new LIR can receive a single /22 allocation
 - Each existing LIR can receive a single /22 allocation
 - Reserve a /16 for potential future technologies that may need IPv4 addresses

prop-062: Use of final /8

- Proposal sent to Policy SIG mailing list 22 July 2008
- Discussion on mailing list
 - 30 posts from 10 people

prop-063: Reducing timeframe of IPv4 allocations from twelve to six months

The problem...

With the imminent depletion of the free pool, it's
possible that networks receiving an allocation to meet
their needs for the next 12 months may mean that other
networks don't have a chance to get any allocation
before the free pool is exhausted

prop-063: Reducing timeframe of IPv4 allocations from twelve to six months

The solution...

 Make allocations based on a six months needs basis, reducing it from 12 months

prop-063: Reducing timeframe of IPv4 allocations from twelve to six months

Proposal stats

- Proposal sent to Policy SIG mailing list 17 July 2008
- Discussion on mailing list
 - 3 posts from 3 people

prop-066: Ensuring efficient use of historical IPv4 resources

The problem...

- While the remaining free pool is gradually being depleted, a lot of historical IPv4 addresses are still being unused.
- When LIRs request more space from APNIC, they do not have to demonstrate that their historical address space is being used.
- LIRs can currently justify resources from the APNIC free pool while still not utilising their historical resources.

prop-066: Ensuring efficient use of historical IPv4 resources

The solution

 Include historical resources when calculating an LIR's usage rate.

prop-066: Ensuring efficient use of historical IPv4 resources

- Proposal sent to Policy SIG mailing list 22 July 2008
- Discussion on mailing list
 - 7 posts from 5 people

Four-byte AS number proposals under discussion

prop-061: 32-bit ASNs for documentation purposes

prop-064: Change to assignment policy for AS numbers

prop-065: Format for delegation and recording of 4-byte AS numbers

prop-061: 32-bit ASNs for documentation purposes

The problem...

- There is currently no range of four-byte AS numbers that is dedicated for use in Internet documentation.
- Any AS number used now in documentation may be used by a real network in future, leading to problems.

prop-061: 32-bit ASNs for documentation purposes

The solution...

Designate four four-byte AS numbers to be used in documentation.

prop-061: 32-bit ASNs for documentation purposes

- Sent to Policy SIG mailing list on 22 July 2008
- Discussion on mailing list
 - 20 posts from 9 people

prop-064: Change to assignment policy for AS numbers

The problem...

 There is slow take up of four-byte AS numbers and little vendor support

prop-064: Change to assignment policy for AS numbers

The solution...

- Add a new date to the schedule for introducing four-byte AS numbers:
 - From 1 July 2009, APNIC assigns:
 - Four-byte AS numbers by default
 - Two-byte AS numbers if a four-byte AS number is demonstrated to be unsuitable

prop-064: Change to assignment policy for AS numbers

- Proposal sent to Policy SIG mailing list 22 July 2008
- Discussion on mailing list
 - 8 posts from 8 people

prop-065: Format for delegation and recording of 4-byte AS numbers The problem...

ASDOT is incompatible with a number of operational systems and router configurations.

prop-065: Format for delegation and recording of 4-byte AS numbers The solution...

 APNIC adopt the ASPLAIN format for representing four-byte AS numbers.

prop-065: Format for delegation and recording of 4-byte AS numbers

- Proposal sent to Policy SIG mailing list 22 July 2008
- Discussion on mailing list
 - 8 posts from 5 people

Other policy proposals at APNIC 26

prop-059: Using the Resource Public Key Infrastructure to construct validated IRR data

prop-060: Change in the criteria for the recognition of NIRs in the

APNIC region

prop-06#: Reserving four-byte ASNs for documentation purposes

prop-060: Change in the criteria for the recognition of NIRs in the APNIC region

The problem...

- To recognise a new NIR under current policy, it must have the support of both the community and the relevant government body in the country of the proposed NIR.
- NIRs can be dominated by government interests.

prop-060: Change in the criteria for the recognition of NIRs in the APNIC region

The solution...

- Allow NIRs to be approved with community approval only.
- New NIRs are approved through a vote by APNIC members.
- Limit government positions on NIR boards.

prop-060: Change in the criteria for the recognition of NIRs in the APNIC region

- Posted to Policy SIG mailing list 16 May 2008
- Discussion on mailing list
 - No posts