

Overview of policy proposals

Policy SIG

Wednesday 26 August 2009

Beijing, China

Proposals under discussion

- prop-050: IPv4 address transfers (from APNIC 27)
- prop-073: Automatic allocation/assignment of IPv6
- prop-074: Internet Assigned Numbers Authority (IANA) Policy for Allocation of ASN Blocks (ASNs) to Regional Internet Registries
- prop-075: Ensuring efficient use of historical AS numbers
- prop-076: Requiring aggregation for IPv6 subsequent allocations
- prop-077: Proposal to supplement transfer policy of historical IPv4 addresses
- prop-078: Reserving /10 IPv4 address space to facilitate IPv6 deployment

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
- There is black market trading now, and this will increase
- The APNIC resource registry needs to accurately reflect current address distribution information

prop-050: IPv4 address transfers

Proposed solution:

- Allow transfers of current IPv4 addresses providing:
 - Address block is /24 or larger
 - Source and recipient organizations are current APNIC account holders
 - Source is ineligible for further address space from APNIC for 12 months unless organization can prove exceptional circumstances
 - Recipient must justify need for address space
 - After we enter “final /8” period, no justification is needed

prop-050: IPv4 address transfers

Changes since APNIC 27:

- Version 5 contains feedback from APNIC 27, final call for comments, and 59 community messages sent to the Policy SIG list in June and July 2009
- Removes reference to historical address transfers (covered by existing policy)
- Removes option of inter-RIR transfers
- No explicit mention of APNIC/NIR transfers (but NIRs can implement if they choose)

prop-050: IPv4 address transfers

Proposal statistics:

- Version 1 sent to mailing list 26 July 2007
- Version 5 sent to mailing list 24 July 2009
- Discussion on mailing list (version 5)
 - 11 posts from 6 people

prop-050: IPv4 address transfers

Other RIRs:

- ARIN and RIPE have implemented transfer policies
- AfriNIC currently has no similar policy or proposal under discussion
- LACNIC is currently discussing a transfer proposal, LAC-2009-04 Transfer of IPv4 Blocks within the LACNIC Region

prop-073: Automatic allocation/assignment of IPv6

Problems this proposal aims to address:

- IPv4 addresses are being exhausted
- There is a perception that it's hard to justify IPv6 address requests from APNIC

prop-073: Automatic allocation/assignment of IPv6

Proposed solution:

- APNIC members that have current IPv4 addresses but not IPv6 can qualify for IPv6 space:
 - An IPv6 /48 (if have IPv4 assignment)
 - An IPv6 /32 (if have IPv4 allocation)
- Simplify process to request IPv6 under this proposal

prop-073: Automatic allocation/assignment of IPv6

Proposal statistics:

- Version 1 sent to mailing list 6 July 2009
- Version 2 sent to mailing list 14 August 2009
- Version 3 sent to mailing list 19 August 2009
- Discussion on mailing list (versions 1-3)
 - 84 posts from 24 people

prop-073: Automatic allocation/assignment of IPv6

Other RIRs:

- Similar proposals raised in RIPE region, but later withdrawn by author:
 - RIPE 2008-01: Assigning IPv6 PI to Every INETNUM Holder
 - RIPE 2008-02: Assigning IPv6 PA to Every LIR
- No other RIR has a similar proposal

prop-074: IANA policy for allocation of ASN blocks to RIRs

Problems this proposal aims to address:

- From 1 Jan 2010 under current global policy, RIRs can't ask for separate 16 and 32 bit blocks from IANA
- RIRs are still assigning 16 bit ASNs (and almost no-take up of 32 bit ASNs)
- From 1 Jan 2010, RIRs wanting to request more 16 bit ASNs won't qualify because of their unallocated 32 bit ASNs

prop-074: IANA policy for allocation of ASN blocks to RIRs

Proposed solution:

- Extend IANA's ability to allocate separate 2-byte ASN blocks to RIRs by one year
- Global policy proposal, so must be adopted in all regions before it can become policy.
 - Has been submitted to ARIN, LACNIC and RIPE
 - To be submitted to AfriNIC

prop-074: IANA policy for allocation of ASN blocks to RIRs

Proposal statistics:

- Sent to mailing list 13 July 2009
- Discussion on mailing list
 - 9 posts from 6 people

prop-074: IANA policy for allocation of ASN blocks to RIRs

Other RIRs:

- Global policy proposal, so must be adopted in all regions before it can become policy.
 - Has been submitted to ARIN, LACNIC and RIPE
 - In process of being submitted to AfriNIC

prop-075: Ensuring efficient use of historical AS numbers

Problems this proposal aims to address:

- The 16 bit ASN pool is reaching exhaustion, but many networks are not prepared for 32 bit ASNs
- APNIC can reclaim unused AS numbers assigned under current policies, but there is no equivalent policy for historical AS numbers

prop-075: Ensuring efficient use of historical AS numbers

Proposed solution:

- Permit APNIC to reclaim unused AS historical numbers
- If organization with unused AS numbers wishes to hold on to the AS number, APNIC will not reclaim
- After a period of time, reclaimed AS numbers can be re-assigned

prop-075: Ensuring efficient use of historical AS numbers

Proposal statistics:

- Sent to mailing list 24 July 2009
- Discussion on mailing list
 - 3 posts from 3 people

prop-075: Ensuring efficient use of historical AS numbers

Other RIRs

- No similar proposal or policy for historical AS numbers in other regions

prop-076: Requiring aggregation for IPv6 subsequent allocations

Problems this proposal aims to address:

- Aggregation is required for initial IPv6 allocations
- But no such requirement for subsequent IPv6 allocations
- Therefore, there is a risk of deaggregation

prop-076: Requiring aggregation for IPv6 subsequent allocations

Proposed solution:

- LIRs must agree to aggregate any subsequent IPv6 allocation they receive from APNIC

prop-076: Requiring aggregation for IPv6 subsequent allocations

Proposal statistics:

- Sent to mailing list 29 July 2009
- Discussion on mailing list
 - 9 posts from 8 people

prop-076: Requiring aggregation for IPv6 subsequent allocations

Other RIRs:

- LACNIC is discussing changing initial allocation criteria to require announcing the prefix with the minimum possible level of disaggregation (currently has to be a single prefix).
 - 2007-01: Modifications to the IPv6 Prefix Initial Allocation Policy
- RIPE is discussing removing routing requirements from initial allocation:
 - 2009-06: Removing Routing Requirements from the IPv6 Address Allocation Policy

prop-076: Requiring aggregation for IPv6 subsequent allocations

Other RIRs:

- AfriNIC and ARIN
 - Initial IPv6 allocation criteria in both these regions require a plan to aggregate, with no requirement for aggregation for subsequent allocation criteria.
 - Neither RIR is has any proposal to modify these criteria

prop-077: Proposal to supplement transfer policy of historical IPv4 addresses

Problems this proposal aims to address:

- Historical IPv4 transfer policy was designed to encourage address holders with no relationship with APNIC to bring their historical resources into the current policy framework.
- But proposal for transfer of current space (prop-050) and allocations direct from APNIC require justification

prop-077: Proposal to supplement transfer policy of historical IPv4 addresses

Proposed solution:

- Recipients of historical IPv4 address transfers must justify the need for those resources according to:
 - prop-050 justification criteria (if adopted) OR
 - existing IPv4 allocation criteria (if transfer policy for current IPv4 addresses not adopted)

prop-077: Proposal to supplement transfer policy of historical IPv4 addresses

Proposal statistics:

- Sent to mailing list 29 July 2009
- Discussion on mailing list
 - 11 posts from 5 people

The logo for APNIC 28 is located on the left side of the slide. It consists of a vertical red bar with the text 'APNIC 28' in yellow at the top and 'Beijing, China 24-28 August 2009' in white below it. At the very top of the bar is a small graphic of a globe with red and white lines.

prop-077: Proposal to supplement transfer policy of historical IPv4 addresses

Other RIRs:

- Quite complex. Please see the proposal text for details on how other RIRs handle historical transfers.

prop-078: Reserving /10 IPv4 address space to facilitate IPv6 deployment

Problems this proposal aims to address:

- Allocations from the “final /8” may be used to expand IPv4 networks, and not to prepare for IPv4/IPv6 transition
- Proposes reserving a /10 from the “final /8” for networks with an immediate plan for IPv6

prop-078: Reserving /10 IPv4 address space to facilitate IPv6 deployment

Proposed solution:

- Reserve a /10 from the “final /8” for networks with an immediate plan for IPv6
- Allocation size to be /24
- Networks can get more than one allocation from the /10 (with 12 months between allocations)
- Networks are still eligible to get a separate allocation under the “final /8” policy

prop-078: Reserving /10 IPv4 address space to facilitate IPv6 deployment

Proposal statistics:

- Sent to mailing list 29 July 2009
- Discussion on mailing list
 - 9 posts from 5 people

prop-078: Reserving /10 IPv4 address space to facilitate IPv6 deployment

Other RIRs:

- ARIN has adopted a similar policy
 - 2008-5: Dedicated IPv4 block to facilitate IPv6 Deployment
- RIPE has similar policy proposal under discussion
 - 2009-04: IPv4 Allocation and Assignments to Facilitate IPv6 Deployment
- AfriNIC and LACNIC currently have no similar policies or proposals