21 - 31 August 2012

Overview of Proposals

APNIC 34 Policy SIG Meeting

Problems prop-101 aims to address

- Portable IPv6 assignments of available only if network is currently - or plans to be multihomed within three months.
- There are technical or commercial reasons why some will not be multihomed
- If provider assigned IPv6
 addresses are used, then any
 change of ISP would require
 renumbering

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prop-101: Removing multihoming requirement for IPv6 portable assignments

prop-101: Proposed solution (sec. 4(B))

 An organization will be <u>automatically</u> eligible for a portable assignment if they have previously justified an IPv4 portable assignment from APNIC.

prop-101: Proposed solution (sec. 4(C))

- Requests by organizations that have not previously received an IPv4 portable assignment will need to be accompanied by: (Sec 4.(C))
 - a. <u>a reasonable technical justification indicating why IPv6 addresses</u> from an ISP or other LIR are unsuitable examples of suitable technical justifications may include (but are not limited to):
 - i. Demonstration that the relevant network is statically addressed and of a size or complexity that would make IPv6 renumbering operationally impractical within an acceptable business period, together with evidence that dynamic or multiple addressing options are either not available from the relevant ISP or are unsuitable for use by the organization;
 - ii. <u>Demonstration that any future renumbering of the relevant network could potentially interfere with services of a critical medical or civic nature;</u>
 - b. A detailed plan of intended usage of the proposed address block over at least the 12 months following allocation. A request for an IPv6 portable assignment will need to be accompanied by a reasonable technical justification indicating why IPv6 addresses from an ISP or other LIR are unsuitable.





prop-101: Proposed solution (sec. 4(D))

- The minimum IPv6 portable assignment is one /48.
 Larger block can be assigned:
 - a. If it is needed to ensure that the HD-ratio for the planned network assignments from the block remains below the applied HD-ratio threshold specified in Section 5.3.1 of the APNIC IPv6 policy [6], or;
 - b. If addressing is required for 2 or more of the organization's sites operating distinct and unconnected networks.
- Any requests for address blocks larger than the minimum size will need to be accompanied by a detailed plan of the intended usage of the proposed assignment over at least the following 12 months.



prop-101: Proposed solution (sec. 4(E))

- a. Only one IPv6 address block is to be given to an organization upon an initial request for a portable assignment;
 - Subnets may be to different sites;
- APNIC Secretariat applies sparse allocation so that subsequent requests would be accommodated through a change of prefix mask

prop-101: Proposed solution (sec. 4(E))

- Subsequent request must be accompanied by information demonstrating:
 - Why an additional space is required, and why an assignment from from an ISP or other LIR cannot be used for this purpose instead;
 - That the use of previous assignment generated the minimum possible number of global routing announcements and the maximum aggregation of that block;
 - How the additional assignment would be managed to minimise the growth of the global IPv6 routing table.



prop-101: Proposed solution (sec. 4(E))

- d. The APNIC Secretariat will produce reports of the number of portable IPv6 assignments requested regularly.
- e. Sec 4(E)(e) is deleted;
 - The first Policy SIG meeting of 2014 (expected to be APNIC Meeting 35) will as an agenda item consider the observed rate of IPv6 portable assignments and potential 10-year forecasts of growth of portable assignments prepared by the APNIC Secretariat extrapolated on the observed data, and by consensus consider the question "Should the IPv6 portable assignment criteria revert to requiring multihoming?"

Problems prop-103 aims to address

- The APNIC community spends time and resources proposing, discussing, arguing, ... about IP address policies out of habit.
- It is important to maintain an open policy process, but proposals are often not relevant to the prudent and high quality operation of the internet.



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prop-103: A Final IP **Address Policy Proposal**



Proposed Solution

- New IPv4 proposals should be carefully examined to ensure they are really necessary and address real needs that can not be accomplished with existing processes.
- A discussion of the problem should precede proposals for new policy.
- In general, the same should hold for IPv6, although it is realized that, as we learn more about IPv6 use and deployment, more policy development may be useful.

Problems prop-104 aims to address

- Transfer policy requires recipients to demonstrate need for the next 12 months.
- ARIN evaluates transfer needs for 24 months. This leads to difference in conditions of the transfer between LIRs in the APNIC region and the ARIN region
- 12 months is also too short for transfers within the APNIC region considering many xSPs plan their service and their addressing requirements beyond one year.

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prop-104: **Clarifying** demonstrated needs requirement in **IPv4** transfer policy

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Proposed Solution

- This proposal clarifies the requirement on a period approved for the transferred resource to recipients of IPv4 transfers based on the demonstrated needs, and defines its period as "24 months".
- In case of Inter-RIR transfer, when there is a RIR which defines a period longer than 24 months in the future, the longer period adopted by the other RIR will be adopted.
- This proposal does not intend to change the requirement for an address allocation or assignment.

