

ARIN-2014-16

Section 4.10 Austerity Policy Update

Problem Statement

- NRPM section 4.10 defines an IPv4 to IPv6 transition pool which was intended to be used by new entrants after the IPv4 free pool has been exhausted. This policy was written prior to exhaustion in the APNIC and RIPE region and has largely not been used to date. It is believed that the current policy may be too restrictive to be useful to many organizations within the ARIN region. Furthermore the during the ARIN 33 public policy meeting experience report (1), ARIN staff noted issues with the current IPv4 policy after the IPv4 free pool is exhausted.
- RIPE & APNIC adopted an “austerity” policy which allows organizations to obtain a small single block directly from the registry. These policies appear to have been quite effective at getting IPv4 resources to organizations without address space after IPv4 exhaustion. Learning from other regions, we have crafted a policy to update section 4.10 to adopt some of the policy text from the RIPE & APNIC region while looking at the unique aspects of the ARIN region’s number resource needs.

Current High Level Changes

- Adds an additional Austerity option to section 4.10 in addition to the transition technology, rather than the original approach of replacing the transition technology section.
- Shrinks the minimum transition technology pool from the existing /10 to a /11.
- Defines the new requirements for getting an assignment under the proposed Austerity section.
- Directs resources obtained by ARIN under section 10.5 to supply assignments for section 4.10 requests.

Policy Statement

Replace Section 4.10 with the following.

4.10 Dedicated IPv4 block to facilitate IPv6 Deployment

When ARIN receives its last /8 IPv4 allocation from IANA, a contiguous /10 IPv4 block will be set aside and dedicated to facilitate IPv6 deployment and continued transition from IPv4 to IPv6.

Address space received from IANA under the “Global Policy for Post Exhaustion IPv4 Allocation Mechanisms by the IANA (NRPM 10.5)” by ARIN shall be allocated or assigned under this section.

Allocations and assignments from this block must be justified by immediate IPv6 deployment requirements. ARIN shall use sparse allocation within these blocks.

Policy Statement

4.10.1 Austerity Policy

Organizations must obtain an IPv6 block to receive a block under section 4.10.1 and show documentation on how the IPv6 and IPv4 block will be used to facilitate an organization's operational needs. These allocations or assignments will be subject to a minimum size of /28 and a maximum size of /22.

In order to receive an allocation or assignment under this policy:

1. the organization, its parent(s), or subsidiary organizations, may not have received IPv4 address resources greater than or equal to a /22 from ARIN or any other RIR;
2. the organization must show immediate use (within 90 days) of 25% of the allocation;
3. the organization is eligible to receive only one contiguous IPv4 block under this section;
4. the organization may apply to ARIN for an increase in their allocation up to a /22, if the previous allocation under this section shows a utilization of at least 80%, increases will only be granted if adjacent bit-boundary aligned space is available at the time of request.

Policy Statement

4.10.2 Transition technologies

Allocations and assignments from this block must be justified by immediate IPv6 deployment requirements. Examples of such needs include: IPv4 addresses for key dual stack DNS servers, and NAT-PT or NAT464 translators. ARIN staff will use their discretion when evaluating justifications.

These allocations or assignments will be subject to a minimum size of /28 and a maximum size of /24. ARIN shall reserve a minimum of a /11 for allocations under this subsection.

In order to receive an allocation or assignment under this policy:

1. the applicant may not have received resources under this policy in the preceding six months;
2. previous allocations/assignments under this policy must continue to meet the justification requirements of this policy;
3. previous allocations/assignments under this policy must meet the utilization requirements of end user assignments;
4. the applicant must demonstrate that no other allocations or assignments will meet this need;
5. on subsequent allocation under this policy, ARIN staff may require applicants to renumber out of previously allocated / assigned space under this policy in order to minimize non-contiguous allocations.

Community Feedback

- Remove the wording of the IANA trigger since the event has already passed.
- Leave the pool reserved for transaction technologies as a /10 and supply the austerity pool from IANA returns.
- Add more clarity about IANA returns and how much should fund which section

Discussion

- Which suggested changes do you support or oppose?
- Should other changes be considered?
- Abandonment is being considered without clear desire from the community to create an austerity pool?