

Global Policy for IANA Allocations Post Depletion

Three Past and Current Global Policy Proposals

[GPP-IPv4-2009]

Allocation of IPv4 Blocks to Regional Internet Registries

- ARIN Policy Proposal 82
- Draft Policy ARIN-2009-3
- Establish a “recovered IPv4 pool” for returns to IANA of /24 or larger sized blocks at quarterly intervals
- ARIN region made the return to IANA of recovered, reclaimed, or returned blocks optional
- Post depletion, there will be two allocation periods per year beginning March 1 & September 1
 - Allocation unit = 1/10 the total pool in the beginning of the period (rounded down to the nearest CIDR, no smaller than a /24)
 - An RIR can request space if its current available holding is less than half the allocation unit, and it hasn't already received space in this period
- Public reporting

Three Past and Current Global Policy Proposals

[GPP-IPv4-2010] Global Policy Proposal for the Allocation of IPv4 by IANA Post Exhaustion

- **Policy Proposal 115**
- **Draft Policy ARIN-2010-10**
- Establish a “Reclamation Pool” for returns to IANA including free pool fragments
 - Post depletion allocations will be made beginning each quarter
 - Allocations will be between a /8, and the largest RIR minimum allocation / assignment
 - Allocations will be of equal size to all RIRs in a “depleted” status
 - An RIR is consider depleted when all of the following are true:
 - RIR’s available space is less that a /8 equivalent
 - Up to a /10 can be reserved for special use (austerity measure or other reservation) and not counted against available space
 - RIR has a valid pending request it cannot fulfill
 - RIR publicly declares it is depleted
- **Public reporting**
- **Transfer hook**

Three Past and Current Global Policy Proposals

[GPP-IPv4-2011] Global Policy for Post Exhaustion IPv4 Allocation Mechanisms by the IANA

- ARIN-prop-137
- establish a “Recovered IPv4 Pool” containing free pool fragments and any returns to IANA
 - Allocations made when the first RIR has less than a /9 available, and then in two allocation periods per year beginning March 1 & September 1
 - Allocation unit determined at beginning of allocation period as 1/5 total space (rounded down to nearest CIDR minimum a single /24)
 - Each RIR will get the same sized allocation unit
- Public Reporting

Discussion

- Is there support for GPP-IPv4-2011 in the ARIN community?
- What advice would you provide the authors / AC for modification?
- Of the three policies what qualities does the community desire a global policy in the space to have?

Food for Thought

- GPP-IPv4-2011 is not needs based. Each RIR gets the same sized chunk.
- GPP-IPv4-2011 does not make provision for preventing addresses moving from a region with strong Internet stewardship to one with open transfer policy (no transfer hook)
- GPP-IPv4-2011 & GPP-IPv4-2009 have 2 allocation periods / year, GPP-IPv4-2010 has 4

Food for Thought

- GPP-IPv4-2010 depletion is measured as having less than a /8 available, and can only count a /10 for special use
 - May disqualify APNIC (and RIPE) whose austerity policies will leave most a /8 unutilized
 - May disqualify ARIN who has already reserved a /10 for austerity and is considering putting aside a /16 for critical infrastructure and a /10 for shared transition space
 - Consider changing to a /8?
- GPP-IPv4-2010 concern that an RIR may teeter in and out of depletion status
 - Consider changing to considering depletion as being in this status at any point after getting its last allocation for IANA in the previous window
- Concern that when initially activated, if only one RIR is depleted at the beginning of the next quarter, and the pool has a /8 or less equivalent space, then it will empty the pool
 - Consider a waiting period to allow other RIRs to deplete? How long is fair?
 - Consider some other rule to prevent one RIR to empty the pool?

How to Proceed?

- Deprecate GPP-IPv4-2010/GPP-IPv4-2009?
- Modify GPP-IPv4-2010 in hopes of gaining consensus in APNIC and LACNIC? What modifications?
- Combine some parts of GPP-IPv4-2010 with GPP-IPv4-2011? Which parts?
- Provide advice to authors of GPP-IPv4-2011? What advice?

Alternate to a Global Policy

- Take IANA out of the equation for now
- Codify the ability for registrants anywhere in the world to receive space under ARIN policy
 - ARIN retains management and stewardship
 - Allocations, assignments and transfers follow ARIN policy
- Could be globally coordinated policy with no action required by other RIRs
 - “rubber stamp”
- Automatically revoked upon Global IANA policy adoption