

Global policy proposal for the allocation
of IPv4 blocks to
Regional Internet Registries

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Authors & Disclaimer

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Problem Statement

- Current global policy on IPv4 does not cover reclaimed address space
- RIRs have no mechanism / policy to transfer address space among themselves

Introduction

- This is a Global Policy Proposal to govern allocation from the IANA to the RIRs
- Performance requirements to be defined separately after ratification

Definitions

- Recovered address space
 - Reclaimed space
 - Returned space
 - Excluding freshly reclaimed space after termination of contracts
- IPv4 address holdings
 - $\langle \text{unallocated space} \rangle$ minus $\langle \text{reserved space} \rangle$

Implementation

- Phase 1: Pre-Depletion
 - IANA sets up “recovered IPv4 pool”
 - Recovery of IPv4 address space by RIRs
 - Return to IANA every 3 months
 - In aggregated blocks of /24 or larger
- Phase 2: Post-Depletion
 - After ratification and announcement of IANA depletion
 - Rescind ASO-001-02
 - Allocation by IANA under this global policy commences

IANA Allocations in Phase 2

- Definition “Allocation Period”
 - 6 months following 1 March & 1 September
- Determination of “IPv4 Allocation Unit”
 - 1/10 of IANA IPv4 address pool, rounded down to the next CIDR (power-of-2) boundary
- Allocation to RIRs
 - One allocation per RIR per allocation period, if RIR is eligible
 - One allocation unit (smallest number of blocks)

Eligibility

- RIR must not yet have received an allocation during the current allocation period
- RIR holdings are less than 50 % of current allocation unit
- New RIRs: One allocation unit on RIR recognition, or asap

Reporting

- IANA keeps
 - Log of returned IPv4 address space
 - Log of allocated IPv4 address space
 - Public registry of all IPv4 address space
- IANA may make public announcements of transactions under this policy

Odds & Ends

- Timeline
 - Implementation immediately after ratification
- Advantages
 - Defines mechanism for distribution of reclaimed address space
- Disadvantages?

Status in other RIRs' regions

APNIC:

Original proposal approved during meeting,
subject to last comment period.

Change proposed in **ARIN** region:

Make returns of non-legacy reclaimed space
optional.

Questions / Discussion