Autonomous System (AS) Number Assignment Policies

RIPE

Document ID: ripe-497
Date: August 2010

1. Introduction

This document describes the policy governing the allocation of IPv4 address space from the IANA to the Regional Internet Registries (RIRs).

This document does not stipulate performance requirements in the provision of services by the IANA to an RIR in accordance with this policy. Such requirements should be specified by appropriate agreements among the RIRs and ICANN.

2. Definitions

2.1 Recovered address space

Recovered address space is that address space that is returned to an RIR as a result of any activity that seeks to reclaim unused address space or is voluntarily returned to the RIR or is reclaimed by the RIR as a result of legal action or abuse determination. Recovered address space does not include that address space that is reclaimed because of non-payment of contractual fees whose reclamation date is less than one year at the time of the report.

2.2 IPv4 address holdings

IPv4 address holdings are all unallocated IPv4 address space held by an RIR to include recovered address space not yet returned less that address space that is committed in accordance with the RIR's reservation policy and practices.

3. Details of the Policy

This policy is to be implemented in two phases:

Phase I: Recovery of IPv4 address space

Phase II: Allocation of recovered IPv4 address space by the IANA

3.1 Phase I: Recovery of IPv4 address space

Upon ratification of this policy by the ICANN Board of Directors the IANA shall establish a mechanism to receive IPv4 address space which is returned to it by the RIRs, and hold that address space in a 'recovered IPv4 pool'.

Each RIR through their respective chosen policies and strategies may recover IPv4 address space which is under their administration. Each RIR shall at quarterly intervals return any such recovered address space to the IANA in aggregated blocks of /24 or larger, for inclusion in the recovered IPv4 pool.

During Phase I, no allocations will be made from the recovered IPv4 pool.

3.2 Phase II: Allocation of recovered IPv4 address space by the IANA

Upon ratification of this policy by the ICANN Board of Directors and a declaration by the IANA that its existing free pool of unallocated IPv4 address space is depleted; Global Addressing Policy ASO-001-2 (adopted by ICANN Board 8 April 2005) is rescinded. IANA will then commence to allocate the IPv4 address space from the recovered IPv4 pool.

3.2.1 Allocation of IPv4 address space

For the purposes of this policy, an 'IPv4 allocation period' is defined as a six-month period following 1 March or 1 September in each year.

At the beginning of each IPv4 allocation period, the IANA will determine the 'IPv4 allocation unit' for that period, as 1/10 of its IPv4 address pool, rounded down to the next CIDR (power-of-two) boundary.

In each allocation period, each RIR may issue one IPv4 request to the IANA. Providing that the RIR satisfies the allocation criteria described section 3.2.2, the IANA will allocate a single allocation unit, composed of the smallest possible number of blocks available in its IPv4 address pool.

3.2.2 IPv4 address space allocation criteria

A RIR is eligible to receive additional IPv4 address space from the IANA when the total of its IPv4 address holdings is less than 50% of the current IPv4 allocation unit, and providing that it has not already received an IPv4 allocation from the IANA during the current IPv4 allocation period.

3.2.3 Initial allocation of IPv4 address space

Each new RIR shall, at the moment of recognition, be allocated one (1) allocation unit by the IANA. If an allocation unit is not available, then the IANA will issue this block as soon as one is available. This allocation will be made regardless of the newly formed RIR's projected utilisation figures and shall be independent of the IPv4 address space that may have been transferred to the new RIR by the already existing RIRs as part of the formal transition process.

3.3 Reporting

All returned space is to be recorded in an IANA-published log of IPv4 address space transactions, with each log entry detailing the returned address block, the date of the return, and the returning RIR.

All allocated space is also to be recorded in this IANA-published log of IPv4 address space transactions, with each log entry detailing the address blocks, the date of the allocation and the recipient RIR.

The IANA will maintain a public registry of the current disposition of all IPv4 address space, detailing all reservations and current allocations and current IANA-held address space that is unallocated.

The IANA may make public announcements of IPv4 address block transactions that occur under this policy. The IANA will make appropriate modifications to the "Internet Protocol V4 Address Space" page of the IANA website and may make announcements to its own appropriate announcement lists. The IANA

announcements will be limited to which address ranges, the time of allocation and to which Registry they have been allocated.

Acknowledgement