

IPv4: Where Do We Stand?

RIPE NCC Roundtable Meeting
Brussels – 19 March 2013

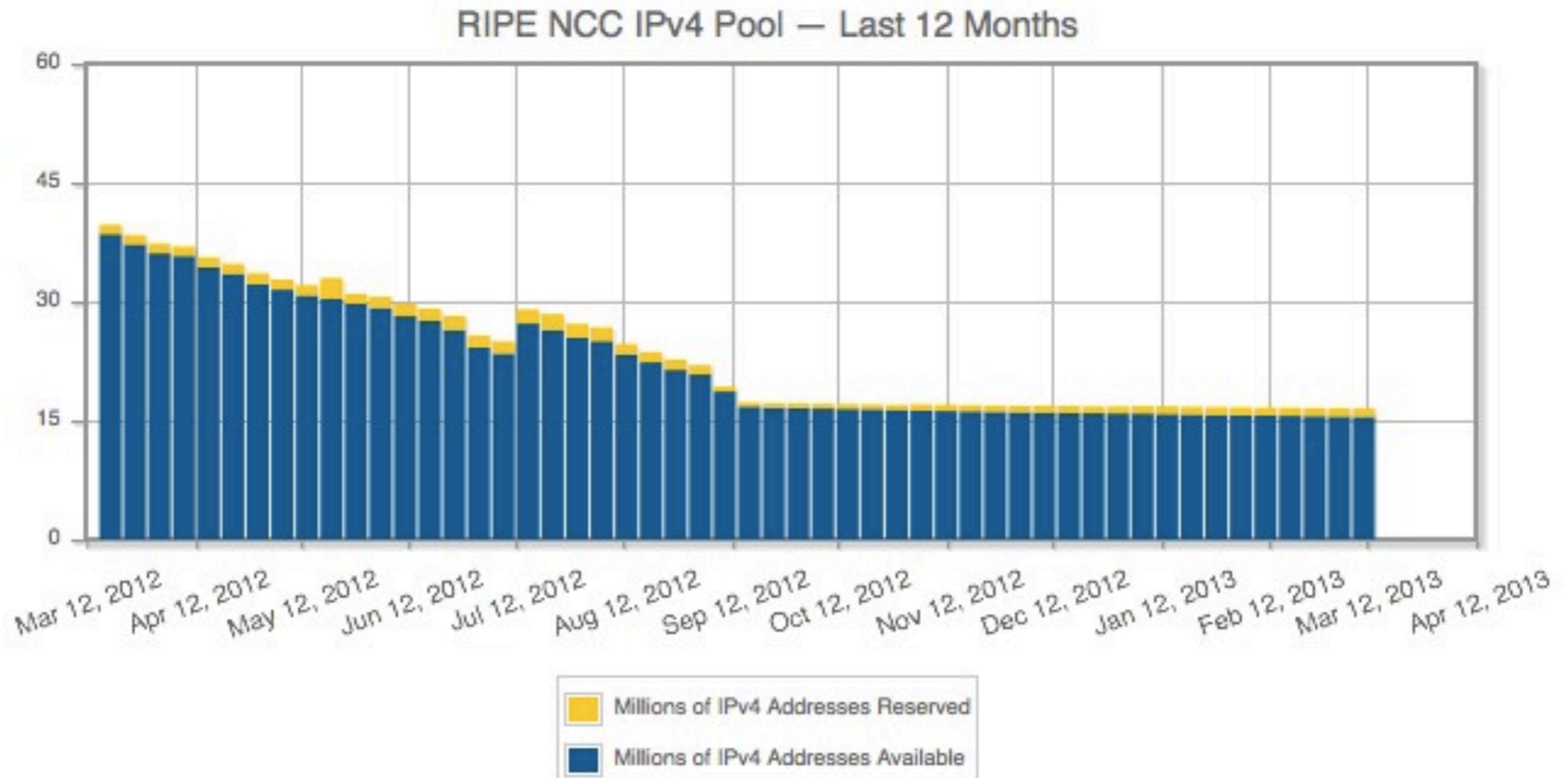
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Allocations From the Last /8

- The RIPE NCC reached the last /8 on 14 September 2012
- LIRs can receive **one** /22 (1,024 IPv4 addresses), even if they can justify a larger allocation
 - LIRs must already have an IPv6 allocation from an upstream LIR or the RIPE NCC
- Fair distribution amongst existing LIRs and new entries
- 1250 /22s issued so far

IPv4 Available Pool



Need More Address Space?

- Three different types of intra-RIR transfers:
 - 1) Mergers and acquisitions
 - 2) “Normal” transfers of allocations
 - 3) Legacy space transfers
- An inter-RIR transfer policy proposal is currently under discussion that would allow transfers between regions with reciprocal policies

1) Mergers and Acquisitions

- If an organisation (or part of it) is being sold, the Internet number resources in use by its network can be transferred
- Documentation requested:
 - Merger/purchase agreement
 - Company registration papers for both parties
 - New “Independent Assignment Request and Maintenance Agreement” (only for Provider Independent resources)
- Based on procedural document ripe-579

2) “Regular” Transfers of Allocations

- Policy requirements
 - Transfers between LIRs only
 - The IP addresses transferred must not be in use
 - Receiving LIR must justify need for IP addresses
 - Permanent or temporary
- Documentation requested:
 - Signed RIPE NCC Transfer Agreement
 - Company registration papers for both parties
 - RIPE NCC additional allocation (pre)approval for receiver
- Based on ripe-582, section 5.5

3) Legacy Space Transfers

- IPv4 address space that was distributed prior to the formation of the Regional Internet Registry (RIR) system
- The RIPE NCC is able to support transfers of legacy space when this is covered by a “Legacy Space Agreement”
- The RIPE NCC is not involved in the transfer when the legacy resources are not covered by a “Legacy Space Agreement”

IPv4 Transfer Listing Service

- Enables LIRs looking to transfer allocations to find receiving parties
- LIRs can also request resources
- Member only service through the LIR Portal
- The RIPE NCC has no interest in financial transactions
- Transfers must follow transfer policy in ripe-583, section 5.5
- Currently 10,240 IPs offered vs 11,255,808 requested

My LIR

- General Information >
- Billing Details >
- LIR Contacts >
- My Location >
- Communication Preferences >
- Manage Users >
- Add Users >

Resources

- IP Analyser 2 >
- IPv4 >
- IPv6 >
- ASN >
- Request Forms >
- Object Editors >
- IPv4 Transfer Listing Service >

Resource Certification

- Dashboard >
- ROA Configuration >
- History >

IPv4 Transfer Listing Service

The IPv4 Transfer Listing Service is a platform that enables RIPE NCC members to list and exchange the IPv4 address space they hold and no longer need. This can be transferred between RIPE NCC members as described in "IPv4 Address Allocation and Assignment Policies for the RIPE NCC Service Region". More information about transfers of IPv4 address space can be found [here](#).

Before any resources can be transferred the receiving LIR must send an [initial/additional allocation form](#) to the RIPE NCC for [pre-approval](#). The request must state the listing service is being used and the desired allocation size.

By using this service you explicitly express your agreement with the [IPv4 Transfer Listing Service Terms and Conditions](#).

[Edit existing offer](#)

[Edit existing request](#)

Offered IPv4 Addresses

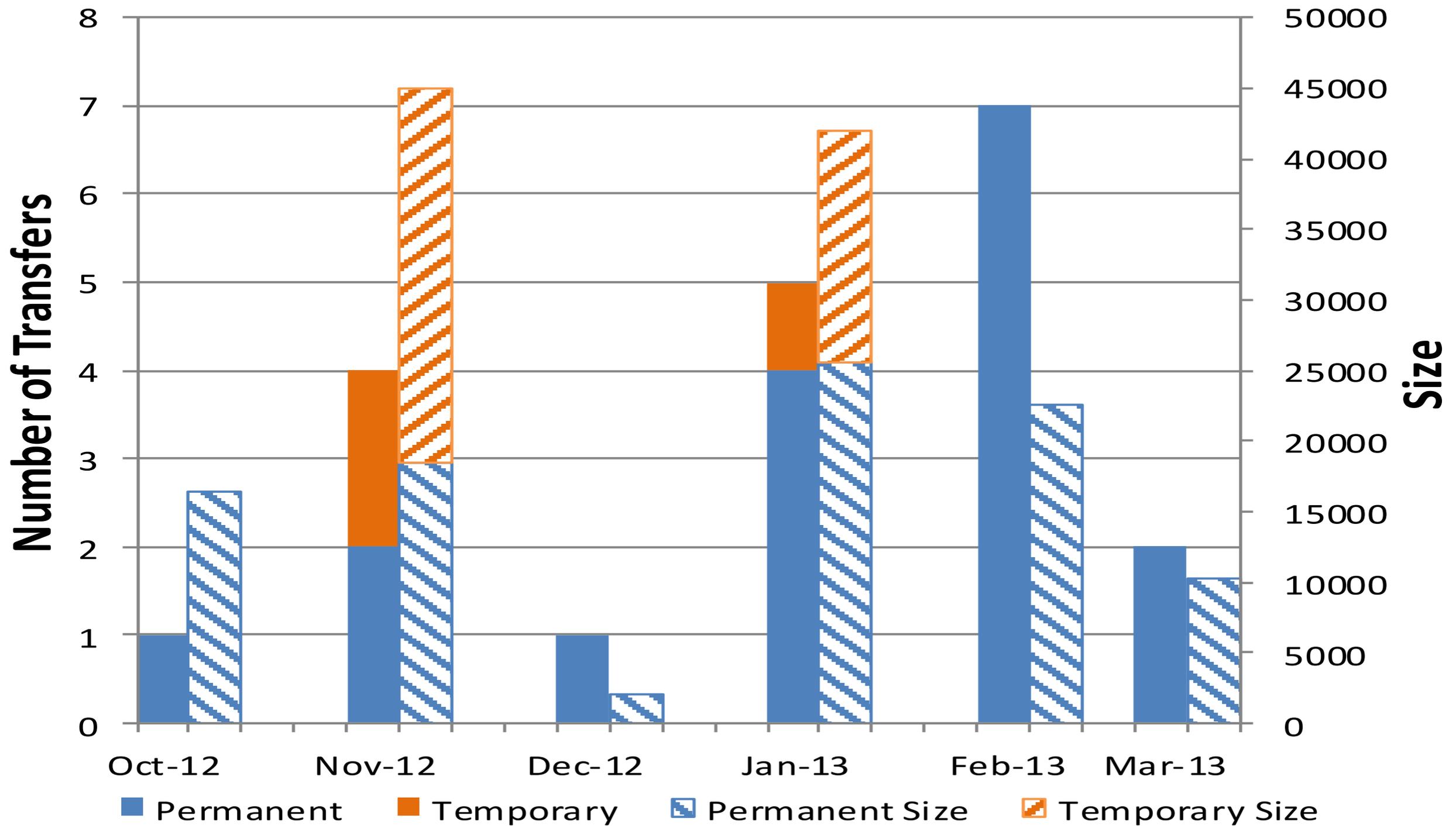
- ▶ /21 (3)

Requested IPv4 addresses

- ▶ /13 (1)
- ▶ /14 (1)
- ▶ /16 (6)
- ▶ /17 (2)
- ▶ /18 (10)

Feedback

Permanent and Temporary Transfers



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Accepted Policy Proposals (1)

- “Transparency in Address Block Transfers”
 - Policy proposal 2012-05
 - RIPE NCC to publish a record of all transfers conducted under the transfer policy
 - Non-approved transfers will be published as aggregate statistics
 - To increase the transparency of the transfer market for IPv4 addresses
 - Status: currently being implemented by the RIPE NCC

Accepted Policy Proposals (2)

- “Revert “Run Out Fairly””
 - Policy proposal 2012-06
 - This proposal reverts the changes made by “Run Out Fairly”
 - Was 3 months allocation / assignment period
 - New allocation / assignment periods
 - 12 months allocation
 - 24 months assignment
 - Status: Implemented

Current Transfer Policy Proposals (1)

- “Policy for Inter-RIR Transfers of IPv4 Address Space”
 - Policy proposal 2012-02
 - This proposal describes how transfers of IPv4 address space between LIRs of different Regional Internet Registries will occur
 - Need for policy compliance between RIRs:
 - Originating party complies with policy of originating RIR
 - Destination party complies with policy destination RIR
 - RIRs must have compatible as well as reciprocal policies
 - Status: review phase

Current Transfer Policy Proposals (2)

- “RIPE NCC Services to Legacy Internet Resource Holders”
 - Policy proposal 2012-07
 - Status: discussion phase (currently a lot of input being received)

Brokers

- Some members may decide to use a broker to facilitate the transfer process
- Listing “recognised brokers” on the website
 - Brokers who have signed an agreement to follow
 - RIPE Policies
 - RIPE NCC procedures

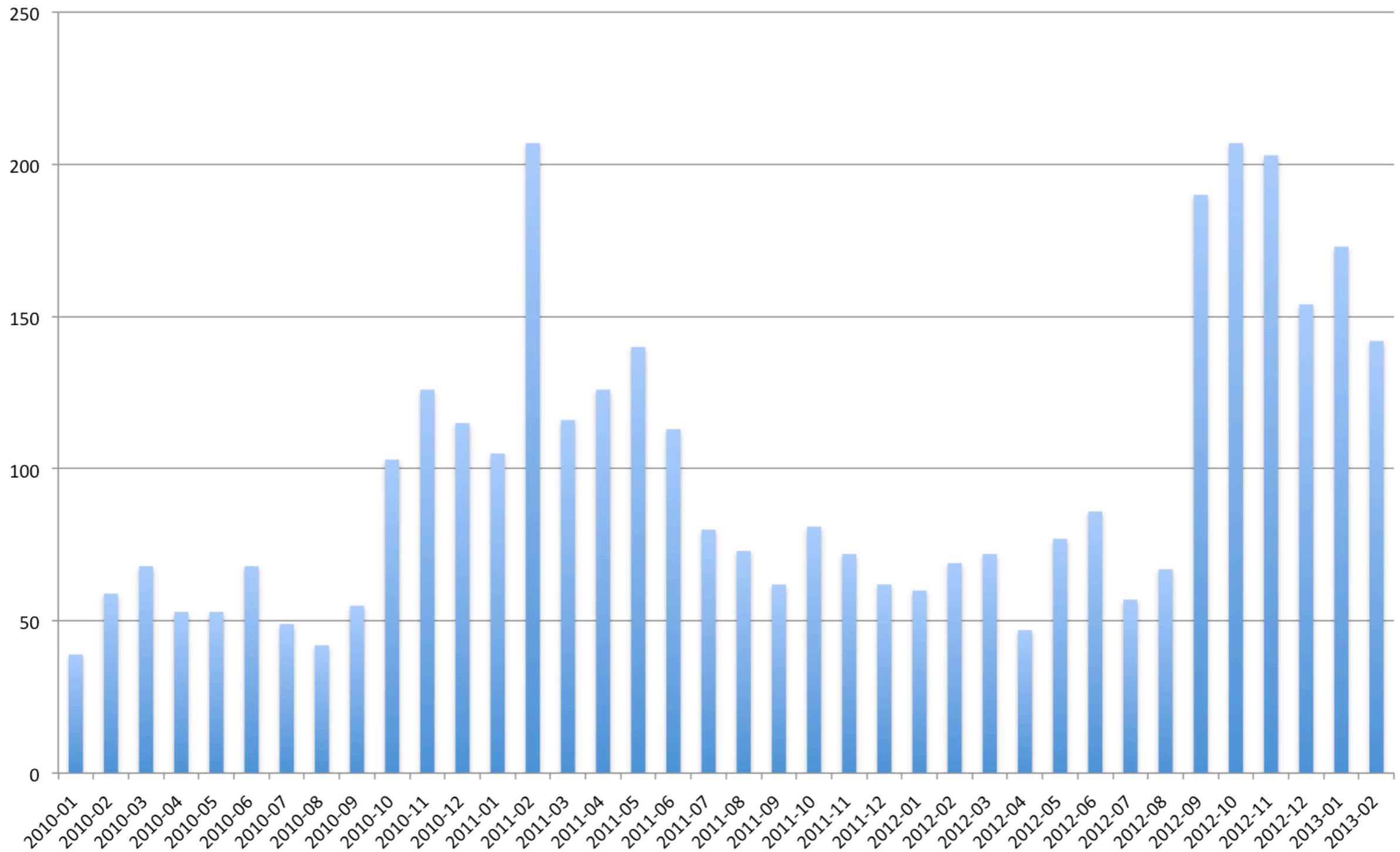
Where Does the RIPE NCC Stand?

- Our ultimate priority is keeping the registry up-to-date
- Ensuring that transfers follow RIPE Policy
- Supporting our members through the transfer process
- The RIPE NCC has no interest in financial transactions

How To Receive IPv6 Addresses

- To qualify for an IPv6 allocation, an organisation must:
 - Be an LIR
 - Have a plan for making assignments within two years
- Minimum allocation size /29

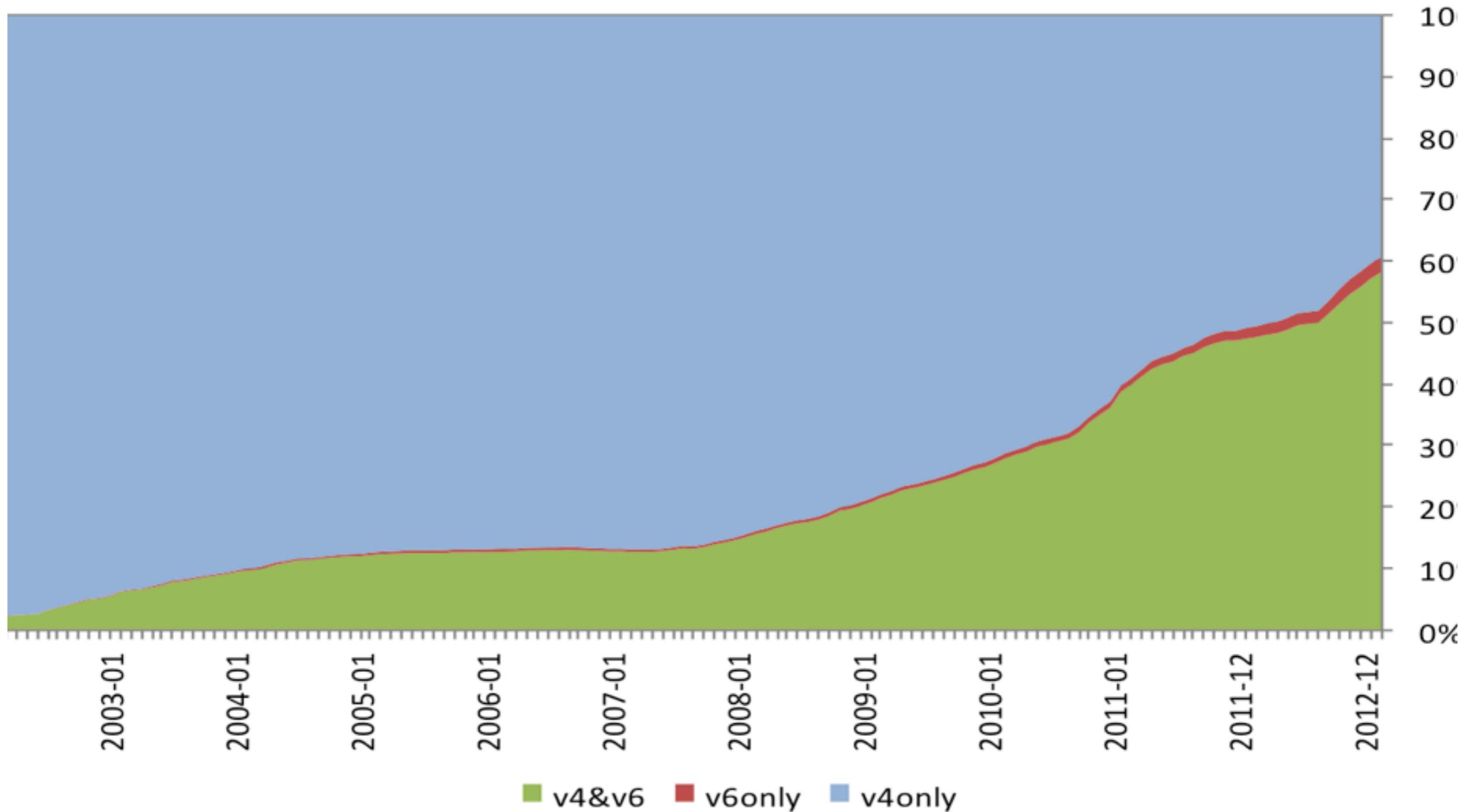
IPv6 Allocations Per Month



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LIRs with IPv4 and IPv6

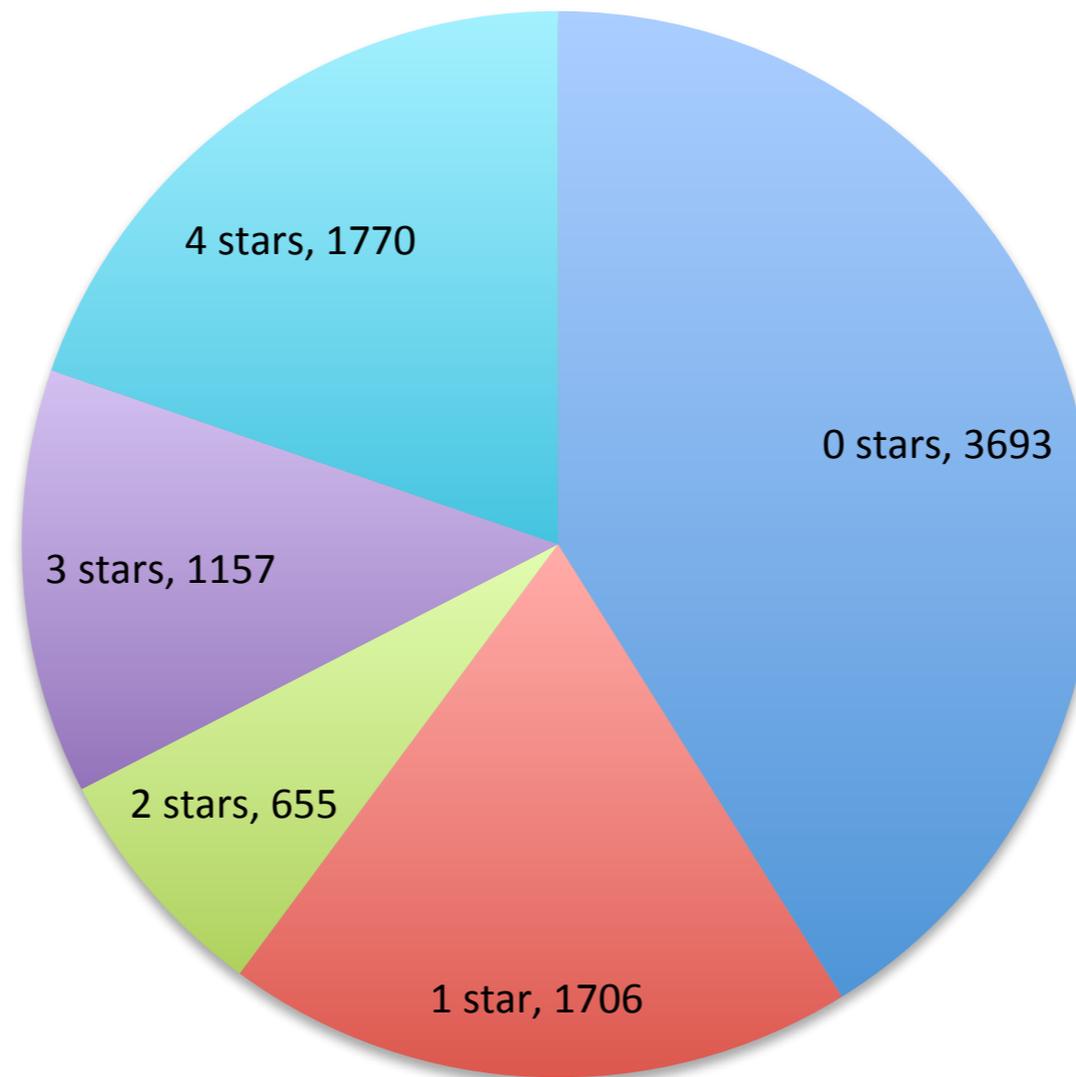


IPv6 (RIPEness) deployment

- IPv6 readiness monitoring
- Rating system:
 - One star if the LIR has an IPv6 allocation
- Additional stars if:
 - A route6 object is in the RIPE Database
 - Reverse DNS is set up
 - IPv6 Prefix is announced
- A list of all 4 star LIRs: <http://ripeness.ripe.net/>

IPv6 RIPEness: 8981 LIRs

RIPE Service Region RIPEness



Questions?



Links

- <http://www.ripe.net/lir-services/resource-management/ipv4-transfers>
- <https://www.ripe.net/ripe/policies/current-proposals/current-policy-proposals>
- <http://ripeness.ripe.net/>
- <https://labs.ripe.net/statistics>