# IPv4: Where Do We Stand?

RIPE NCC Roundtable Meeting 10 September 2013

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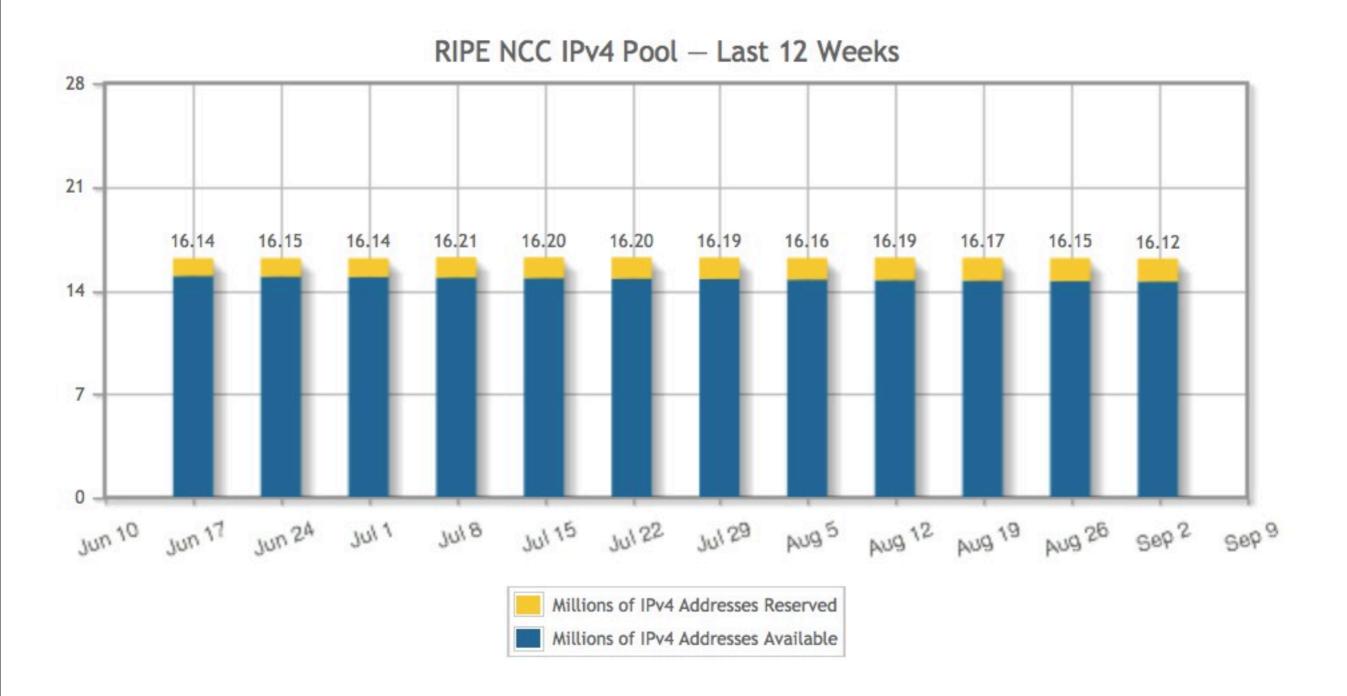


#### Allocations From the Last /8

- 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
- 2080 /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

There are currently no active inter-RIR transfer
 policy proposals under discussion in the RIPE
 community 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"

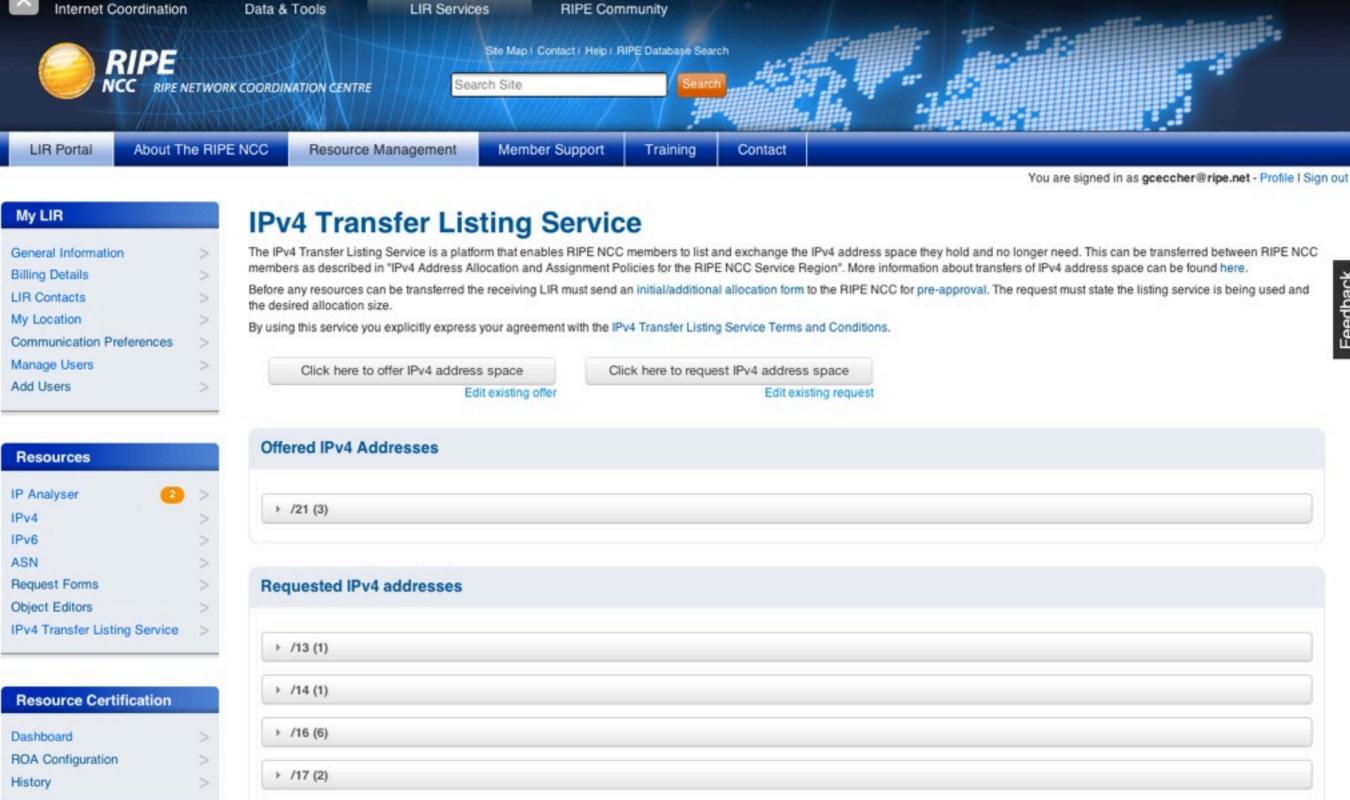


# IPv4 Transfer Listing Service

- 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 503,808 IPs offered vs 16,489,472 requested



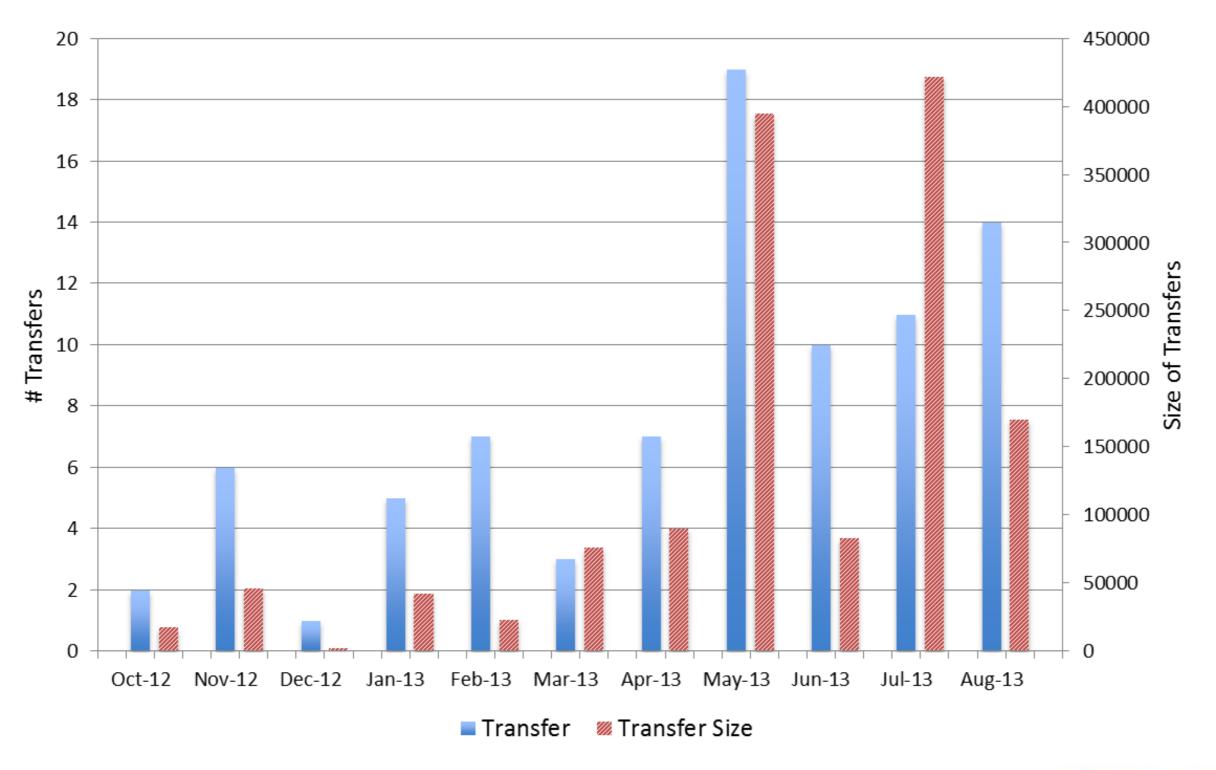






/18 (10)

# Permanent and Temporary Transfers





# 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: implemented by the RIPE NCC:
  - http://www.ripe.net/lir-services/resource-management/ipv4transfers/table-of-transfers



# 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: withdrawn: proposer awaiting outcome of 2013-03



# Current Transfer Policy Proposals (2)

- "No Need Post-Depletion Reality Adjustment and Cleanup"
  - Policy proposal 2013-03
  - This proposal intends to remove the need-based requirement for IPv4 delegations in the RIPE NCC service area.
    - Remove "conservation" as a stated goal of the policy.
    - Remove all active policy text referring to documentation, evaluation of need, and validation of actual usage for both assignments and allocations.
  - Status: Review Phase



# Current Transfer Policy Proposals (4)

- "RIPE NCC Services to Legacy Internet Resource Holders"
  - Policy proposal 2012-07
  - Define the framework for maintenance of registry data of legacy resources and which registry services should be available to legacy resource holders
  - Status: Review Phase



#### 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?

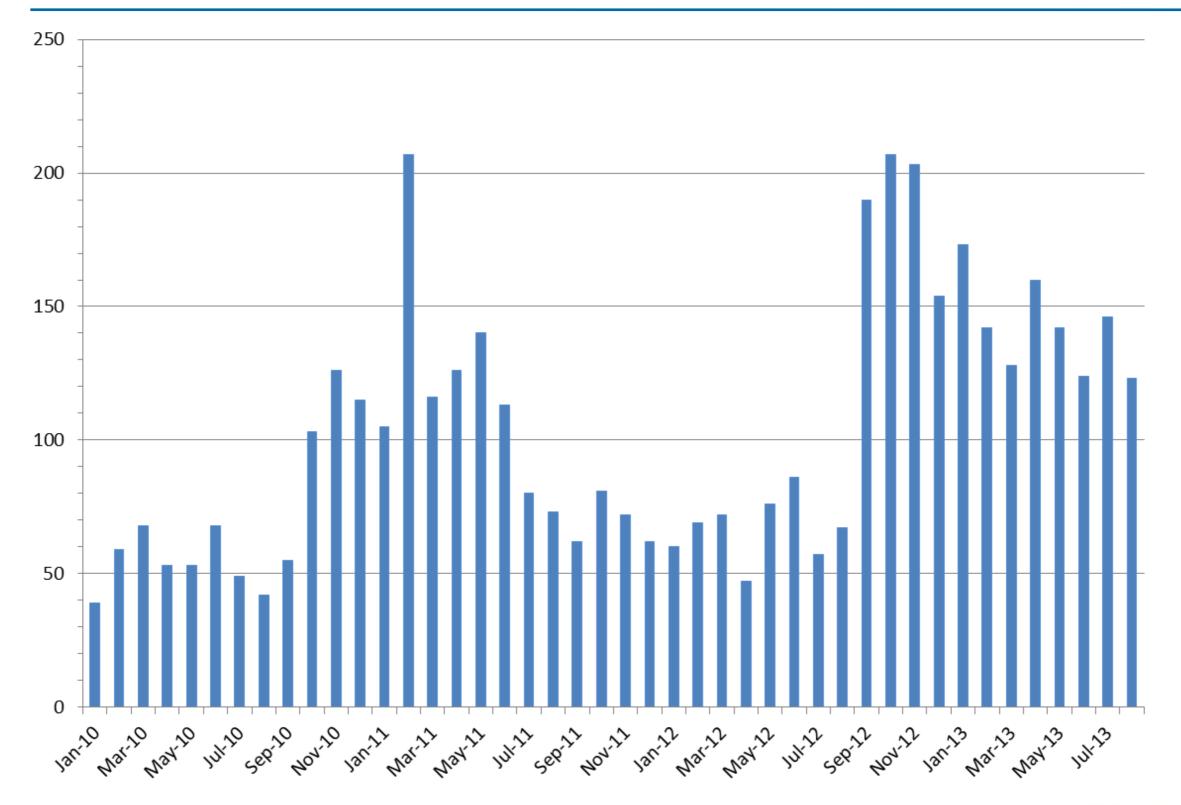
- Our ultimate priority is keeping the registry up-to-date
- Ensuring that transfers follow RIPE Policy
- Supporting our members through the transfer process
- The RIPE NCC has no interest in financial transactions

#### 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
- Initial allocation size /32 up to /29
- Greater than /29 possible if documentation provided

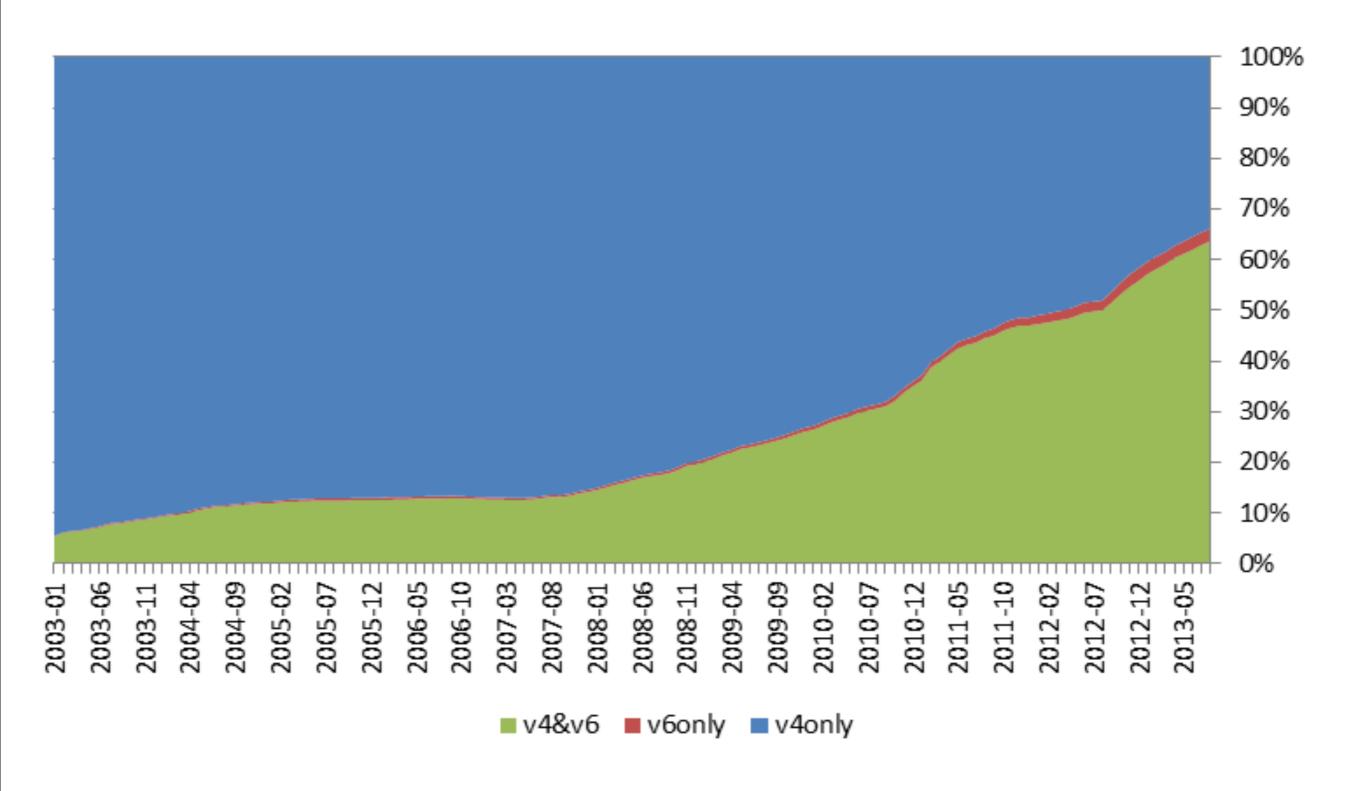


#### IPv6 Allocations Per Month



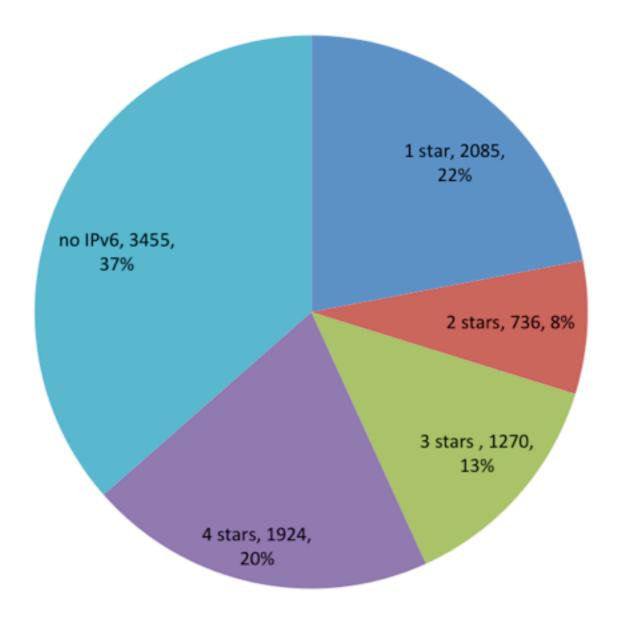


#### LIRs with IPv4 and IPv6





#### IPv6 RIPEness: 9470 LIRs



# 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

