The Aim of This Update

• To report back to the RIPE community:
  - The feedback that we receive from LIRs
  - Highlighting potential problem areas

• Asking for guidance on these topics

• Providing input to the community for policy discussion
Outline

• Update on Action Point from RIPE 70:
  - Publishing statistics for Mergers & Acquisitions

• End User complaints regarding the use of PA Assignments from LIRs

• ALLOCATED PI & ALLOCATED UNSPECIFIED
  - Numbers, background and ideas on clean-up
Update on Action Point from RIPE 70
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- “RIPE NCC to discuss internally if they need policy in order to publish statistics for mergers & acquisitions”
  - RIPE NCC concluded they can publish without policy after notification to parties involved
  - 2015-04 proposes to publish M&A
    “The proposal also adds mergers and acquisitions to the statistics that the RIPE NCC publishes.”
  - RIPE NCC awaiting outcome of policy proposal so it does not interfere with community discussions
  - If proposal not accepted, to publish or not…?
PA Assignments and End User complaints
PA Assignments and End User complaints

• Growing number of complaints:
  - “IP Space given to me as PI”
  - “If I want to keep using the space, I need to buy it”
  - “If I don’t buy it, it’ll go to the highest bidder”

• Some non-ISP LIRs handing out ‘independent’ assignments, not connecting customers to network
PA Assignments and End User complaints

- These practices are strictly not against current policy, although not as intended
- No policy restriction on splitting up allocations
  - Minimum allocation size was removed: 2014-01
ALLOCATED PI & ALLOCATED UNSPECIFIED
• 36 LIRs hold 95 Allocated PI/UNSPECIFIED Blocks

• How did they end up with these blocks?
  - Last Resort Registries became LIRs and kept administration of those blocks
  - “…de facto aggregated but not formally PA because there were no clear contractual arrangements for termination of the assignment.”

• Where possible converted to ALLOCATED PA:
  - “LIRs must ask leaving customers to voluntarily release this address space upon termination of service. Where possible, LIRs should work to make contractual arrangements to convert PI addresses into PA addresses.”
Applicable Policies and Procedures

**RIPE NCC ALLOCATED PI**

End User ASSIGNED PI

All IPv4 policies for ASSIGNED PI apply:
- Stays with End User when changing LIR
- Contractual Requirement for End Users (2007-01)
- Returns to RIPE NCC when deregistered

**LIR ALLOCATED PI / UNSPECIFIED**

End User ASSIGNED PI/PA

“de facto aggregated, not formally PA”
- LIR responsible for ALLOCATION
- LIR and End User made agreements of which RIPE NCC is not aware
- Returns to LIR unless otherwise agreed
# The Current Numbers

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<th>TYPE</th>
<th>ALLOCATIONS</th>
<th>ASSIGNED PI only</th>
<th>ASSIGNED PA only</th>
<th>ASSIGNED PA ASSIGNED PI</th>
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Current Recommendations

• RIPE NCC encourages:

  - LIRs to strive to convert to ASSIGNED PA

    “Where possible, LIRs should work to make contractual arrangements to convert PI addresses into PA addresses.”

  - LIRs to not create new ASSIGNED PI

  - Where possible to convert to ALLOCATED PA
Potential Options for Clean-up

• Convert ALL 95 blocks to ALLOCATED PA
• Hand over administration to RIPE NCC
• When split and transferred, convert to ALLOCATED PA
• Do nothing, proceed as is
• …
Questions
Discussion

ingrid@ripe.net