



Policy Experience Report

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Purpose

- **Review existing policies**
 - Ambiguous text/Inconsistencies/Gaps/Effectiveness
- **Identify areas where new or modified policy may be needed**
 - Operational experience
 - Customer feedback
- **Provide feedback to community and make recommendations when appropriate**

Policies Reviewed

- **Reassignments to Multihomed Downstream Customers (NRPM 4.2.3.6.)**
- **Reassignment Information (NRPM 4.2.3.7.1)**
- **4-Byte ASNs (NRPM 10.3)**

Reassignments to Multihomed Downstream Customers (NRPM 4.2.3.6.)

“This policy allows a downstream customer's multihoming requirement to serve as justification for a /24 reassignment from their upstream ISP, regardless of host requirements.”

Issue

- Potential loophole where customers can game the system:
 - Set up two OrgIDs
 - Get an ASN for each
 - Issue every customer a /24 and claim the two companies they control are the upstream providers for each customer
- Basically an org who wants to sell a /24 as part of a service plan can do so, and still be in compliance with policy, even though their customer has no ASN or router and is not really multihomed

Suggestion

- The issue could be rectified by making the policy text more concise and include the phrase:

"Downstream customer must have their own ASN and intend to originate a route announcement for the /24 from their own routing equipment to each of their BGP peers."

Reassignment Information (NRPM 4.2.3.7.1)

“Each IPv4 assignment containing a /29 or more addresses shall be registered in the WHOIS directory via SWIP or a distributed service which meets the standards set forth in section 3.2”

Issue

- The new language now refers to “swip or distributed server” and makes no mention of Rwhois
- This is being misinterpreted by some customers to mean that reassignments can be made via any type of distributed server including an IRR
 - If data is in IRR, then it's hidden/undiscoverable, because no one knows to look there

Questions for the Community

- Was it the intention of this policy to allow alternate ways of displaying reassignment information in addition to swip and Rwhois?
- If not, should the policy be amended to refer only to ARIN's Whois (via SWIP or REST), or Rwhois?

NRPM 10.3 “IANA Policy for Allocation of ASN Blocks to RIRs”

“After Dec 31, 2010, IANA and the RIRs make no distinction between 2-byte and 4-byte ASNs and will operate from an undifferentiated 32-bit pool”

Staff Implementation

- **Prior to this policy** – ARIN offered choice of 2-byte or 4-byte
- We found that most customers exchanged their 4-bytes for 2-bytes
- Typical reason for exchange: “Upstream said their router wouldn’t support 4-byte ASN”
 - Total issued: 85
 - Total exchanged: 50 (59%)
 - Total still registered: 35
- **Current practice** – ARIN issues 2-byte by default (lowest to highest from single pool)

Questions for the Community

- **What can ARIN do to help with the transition to 4-byte ASNs?**
 - Should we revert to offering choice of 2-byte or 4-byte?
 - Should we issue 4-byte ASNs by default?
 - Other ideas?

