

ARIN31



BARBADOS

# Policy Implementation and Experience Report

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# Recently Implemented Policies

- **ARIN-2012-5: Removal of Renumbering Requirement for Small Multi-homers**
  - No longer required to return and renumber from a /24 or /23 when applying for additional space
- **ARIN-2012-7: Reassignments for Third Party Internet Access (TPIA) over Cable**
  - Address space assigned to equipment is counted as utilized (must use smallest subnet needed to deploy service; must be 80% utilized before requesting more)
- **ARIN-2012-6: Revising Section 4.4 C/I Reserved Pool Size**
  - New gTLDs cannot request under 4.4; /23 max per new gTLD
- **ARIN-2012-8: Aligning 8.2 and 8.3 Transfer Policy**
  - Updated M&A transfer policy criteria to conform with Transfers to Specified Recipient policy criteria

# Purpose of Policy Experience Report

- 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

- What is an End-user and what is an ISP?  
(**NRPM 2.6 and 2.4**)
- Can an RIR issue space to an organization outside its region? (**NRPM 2.2**)
- Merger and Acquisition Transfers (**NRPM 8.2**)
- Leasing IPv4 address space

# Definitions – NRPM 2.4

- **NRPM 2.4 Local Internet Registry**
  - *“An IR that primarily assigns address space to the users of the network services that it provides. LIRs are generally Internet Service Providers (ISPs)”*
- **NRPM 2.4 “End-User”**
  - *“An end-user is an organization receiving assignments of IP addresses exclusively for use in its operational networks”*

# Issues

- No current definition of ISP in NRPM
- Newer technologies do not clearly fit either category (e.g. cloud computing services, “infrastructure as a service” providers, VPN providers)
- Difficult to determine exactly who is an End user and who is an ISP
- With recent policy change to 3 month supply of IPv4 for ISPs, may be advantageous to be in the End-user category

# Questions for the Community

- Should there be a clear definition of End-user and ISP in NRPM?
- Should staff determine whether an org is an ISP or an End-user or should the org be able to choose?
- Should an ISP be able to switch to become an End-user and vice versa thus allowing a different set of policy criteria?

# Potential Solutions

1. Decide that this is not a significant issue
2. Harmonize ISP and end-user policies so that there is no distinction between the two
3. Add clear definitions of end-user and ISP from a technical perspective; delineate their technical characteristics

# Definition - NRPM 2.2

- **NRPM 2.2 – “Regional Internet Registry”**
  - *“The primary role of RIRs is to manage and distribute public Internet address space within their respective regions.”*

# Current Practice

- Must have legal presence in the ARIN region
- Ask requestors to provide geographical location information on where resources will be used
- Must route the least specific prefix within the ARIN region

# Issues

- Requirement to route the least specific prefix within the ARIN region can be “gamed”
  - **Foreign entities can create shell companies in the ARIN region, buy transit here, get IP addresses, and forward packets for use by equipment/customers out of region**

# Issues (cont'd)

- Some US hosting companies adding majority of their customers out of region
  - **Equipment in ARIN region, but almost all customers are out of region (typically foreign hosting providers from a region that has exhausted its last /8)**
  - **Rapid increase in the amount of v4 space being issued to these orgs**
  - **Difficult to verify whether this space is being used efficiently**
    - Can't validate legitimacy of data
    - Incentive for customers to hoard since they can't get resources from the RIR in their own region

# Questions for the Community

- With v4 depletion imminent in some regions, should “RIR shopping” be allowed?
- Should there be clearly defined criteria requiring the resources to be used within the ARIN region?
- Should we continue with current practice or should we make decisions based on where the customers and the equipment serving those customers are located?

# Potential Solutions

1. Decide that this is not a significant issue and continue with current practice
2. Add more stringent justification requirements for out of region customers/  
use
  - **For example, at least 50% of the equipment and customers must be physically located in the ARIN region. (And potentially, will announce the least specific prefix from routers in the ARIN region?)**

## NRPM 8.2. Mergers and Acquisitions

*“ARIN will consider requests for the transfer of number resources **in the case of mergers and acquisitions** under the following conditions:”*

# Issues

- ARIN often sees corporate reorganizations as the basis for transfer requests
- There is no longer a reference to corporate reorganizations in the policy
  - **Corporate reorganizations were part of the previous version of 8.2 policy as follows:**

*“ARIN will consider requests for the transfer of number resources only upon receipt of evidence that the new entity has acquired the assets which had, **as of the date of the acquisition or proposed reorganization**, justified the current entity's use of the number resource.”*

# Current Practice

- Allow 8.2 transfers for corporate reorganizations under the following conditions:
  - **A parent organization can transfer resources to a child organization or vice versa as long as the child is a 100% wholly owned subsidiary**
    - Ask for legal documentation
    - Verify utilization in accordance with policy

# Potential Solution

- Modify the first paragraph to read as follows:
  - “ARIN will consider requests for the transfer of number resources in the case of mergers, acquisitions and corporate reorganizations under the following conditions:”

# Leasing IPv4 Address Space

- There are reports that organizations are “leasing” IPv4 address space to other organizations
- This may not be an ARIN matter, but could have operational impact
  - **Could lead to inaccurate registry data**

# Potential Solutions

1. Decide this is not an issue for ARIN to deal with
2. Create new policy requiring that the actual party using the addresses be listed as an operational contact in Whois
3. Create new policy that would prevent leasing of address space without needs based justification

