Leslie Nobile

American Registry for Internet Numbers (ARIN)

ARIN Policies
How to Obtain Number Resources from ARIN

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ARIN Policies
IPv4

IPv6

ASN

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Terms

- **Allocate**
  - to issue number resources to ISPs (LIRs) for internal networks and for further sub-delegation to customers

- **Assign**
  - to issue number resources to end-users for internal networks only

- **Multi-homed**
  - connectivity to more than one ISP and the same prefix announced by at least two of those ISPs

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IPv4 – Initial Allocation to ISPs

Policy Type	Minimum Size	Criteria
Standard	/20	/20 (in total) reassigned from upstream(s)
Multi-homed (or intent to multi-home)	/22	• /23 reassigned from upstream(s) • Must renumber

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IPv4 – Additional Allocations to ISPs

- **Criteria**
  - 80% efficient use of most recent allocation
  - Returned space to upstream (if applicable)
  - Must show reassignment information
  - Based on three month need (12 months if subscriber has been an ARIN member for longer than a year)

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IPv4 – Assignments to End-users

Policy Type	Minimum Assignment	Criteria
Standard	/20	Show 25% utilization plan now and 50% within 1 year
Multi-homed (or intent to multi-home	/22	Show 25% utilization plan now and 50% within 1 year

Immediate Need

- Criteria
  - Provide justification to show address space will be used within 30 days
    - **Examples of justification**
      - Signed customer contracts
      - Network topology plan
      - Network deployment schedule
      - Equipment receipts
      - Connectivity contracts

- /16 is largest block issued under this policy

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Micro-Allocation

- Criteria
  - Must be critical Internet infrastructure provider to qualify
    - public exchange points, core DNS service providers (e.g. ICANN-sanctioned root, gTLD, and ccTLD operators), RIRs, and ICANN
  - Exchange point operators must provide justification including: connection policy, location, other participants (minimum of two total), ASN, and contact information
- Allocation size no longer than /24 (v4) or /48 (v6)

IPv6 – Initial Allocation to ISPs

- Criteria
  - Be an LIR (an ISP), and not an end site
  - Plan to provide IPv6 connectivity to organizations and route the aggregate prefix
  - Plan to make at least 200 assignments to customers within five years OR be a well known ISP in the ARIN region
- Minimum allocation is /32

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IPv6 – Additional Allocation to ISPs

- Criteria
  - ISP must achieve acceptable utilization of its allocated space; measured in terms of /56 assignments using the HD Ratio of .94

- Example
  - One /32 has 16,777,216 /56s
  - 6,183,533 /56s would have to be assigned in order to request more IP address space

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IPv6 Assignments to End-Users

- Criteria
  - not be an IPv6 LIR; and
  - qualify for an IPv4 assignment or allocation from ARIN under the IPv4 policy currently in effect
- Initial assignment size is /48

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ASN

- Criteria
  - Be a multi-homed site (or intend to multi-home)

    OR

  - Have a unique routing policy

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If You Need Assistance…

- Contact ARIN Registration Services staff
  - Email: hostmaster@arin.net
  - Phone: 703 227-0660

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Thank You

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