



Draft Policy ARIN-2021-6

**Permit IPv4 Leased Addresses for Purposes of Determining
Utilization for Future Allocations**

Andrew Dul, Advisory Council Shepherd



History

- Proposal (ARIN-prop-302) - 17 August 2021
 - https://www.arin.net/participate/policy/proposals/2021/ARIN_prop_302_orig/
- Draft Policy - 21 September 2021
 - <https://lists.arin.net/pipermail/arin-ppml/2021-September/068996.html>
- Revised - 2 March 2022
 - <https://lists.arin.net/pipermail/arin-ppml/2022-March/069428.html>

Shepherds: Andrew Dul, Matthew Wilder



Changes since ARIN 48

- Retitled the policy to better match the overall scope of change
- Added additional changes to remove inconsistencies that would be created by the original draft policy
- Scoped changes to be applicable only to IPv4 transfer (excluded ASN, IPv6, IPv4 wait-list)
- Included changes as recommended by author and discussed at ARIN 48

Problem Statement

Current ARIN policy prevents the use of leased-out addresses as evidence of utilization.



Policy Statement (1)

Section 1.2 Conservation

Replace

“Due to the requirement for uniqueness, Internet number resources of each type are drawn from a common number space. Conservation of these common number spaces requires that **Internet number resources** be efficiently distributed to those organizations who have a technical need for them in support of operational networks.”

with

“Due to the requirement for uniqueness, Internet number resources of each type are drawn from a common number space. Conservation of these common number spaces requires that **free-pool (ASN & IPv6) and IPv4 wait-list Internet number resources** be efficiently distributed to those organizations who have a technical need for them in support of operational networks.”

Policy Statement (2)

Section 1.4 Stewardship

Replace

“The fundamental purpose of Internet number stewardship is to distribute unique number resources to ***entities building and operating networks thereby facilitating*** the growth and sustainability of the Internet for the benefit of all.”

with

“The fundamental purpose of Internet number stewardship is to distribute unique number resources to ***facilitate*** the growth and sustainability of the Internet for the benefit of all.”





Policy Statement (3)

Section 2.4

Replace

“2.4. Local Internet Registry (LIR) A Local Internet Registry (LIR) is an IR that primarily assigns address space to the users ***of the network services that it provides***. LIRs are generally Internet Service Providers (ISPs), whose customers are primarily end users and possibly other ISPs.”

with

“2.4. Local Internet Registry (LIR) A Local Internet Registry (LIR) is an IR that primarily assigns address space to users ***of the network***. LIRs are generally Internet Service Providers (ISPs), whose customers are primarily end users and possibly other ISPs.”

Policy Statement (4)

Section 4.18

Replace

“ARIN will only issue future IPv4 assignments/allocations (excluding 4.4 and 4.10 space) from the ARIN Waitlist.”

with

“ARIN will only issue future IPv4 assignments/allocations (excluding 4.4 and 4.10 space) from the ARIN Waitlist **to those with operational need.**”

Delete Section 8.5.2 Operational Use

~~**ARIN allocates or assigns number resources to organizations via transfer solely for the purpose of use on an operational network.**~~



ARIN-2021-6: Policy Impacts

IPv4 Transfers

- Any organization would be able to note its IPv4 address space as utilized when it is used by its customers regardless of if the organization provides network services to its customers. This would allow an organization to qualify for additional IPv4 address space via transfer even if the organization **does not provide any network services** to its customers.

ARIN-2021-6: PPML Statements

Statements or reasons in Support:

- Markets provide the incentive structure to place addresses in their best and highest need
- Allowing leasing encourages the accurate representation of usage in WHOIS/RDAP
- Lack of clarity on leasing encourages registry shopping
- Limits on leasing cause increase in leasing prices
- Leasing is not prohibited currently, but cannot be used to justify additional additional address blocks
- Current addressing holders have an advantage compared to new entrants
- Users of addressing may lack access to capital to purchase via transfer, leasing allows these orgs to obtain resources

Statements or reasons not in Support:

- Explicit leasing will create additional route-table entries
- IPv4 resources should remain under control of ARIN not leasing companies
- Leasing removes the requirement to provide services with addresses leading to profit as the speculative driver for a leasing company
- Allowing leasing discourages the accurate representation of usage in WHOIS/RDAP
- Encourages existing holder of excess address space to lease rather than transfer
- Leasing could increase addressing cost due to additional non-network organizations entering the market



Questions for the Community

- Do you support the policy as written?
- Are there changes that you would suggest to support the draft policy?
- If you don't support the policy (as-written) or in concept, what are your objections?
- On the mailing list, a number of contributors have noted that there should be some limits on leasing such as limit of initial block size or other limits on how blocks can be leased. Do you support additional requirements to limit the scope of leasing? If so, what requirements?
- Do you believe the problem as described in the problem statement is one that the ARIN region should clarify through a policy change?



Discuss!