

Recommended Draft Policy ARIN-2022-12: Direct Assignment Language Update

Douglas Camin and Leif Sawyer



Problem Statement

Current Text (20 March 2024)

As a result of ARIN's fee harmonization direct assignments are no longer being utilized within ARIN databases therefore language around that has been deprecated and should be modernized and aligned with current ARIN practices.

Policy Statement

Section 2.5 - Update definition of Allocation and Assignment to reflect current practice.

FROM:

"Allocation - IP addresses delegated to an organization directly by ARIN for the purpose of subsequent distribution by the recipient organization to other parties.

Assignment - IP addresses delegated to an organization directly by ARIN for the exclusive use of the recipient organization."

TO:

"Allocation - A block of IP addresses issued from ARIN directly to customers. These IP addresses may be further reassigned or reallocated accordingly.

Assignment – This term is no longer used to describe IP addresses issued by ARIN."

Policy Statement

Section 2.6 - Change “receiving assignments of” to “issued.”

FROM:

“2.6 End User

An end-user is an organization **receiving assignments of** IP addresses exclusively for use in its operational networks.”

TO:

“2.6 End User

An end-user is an organization **issued** IP addresses exclusively for use in its operational networks.”

Policy Statement

Section 2.8 - Change "allocated or assigned" to "issued."

FROM:

"2.8. Registration Services Agreement (RSA)
Number resources allocated or assigned by ARIN under these policies are subject to a contractual agreement between ARIN and the resource holder. Throughout this document, any and all forms of this agreement, past or future, are simply referred to as the Registration Services Agreement (RSA)."

TO:

"2.8. Registration Services Agreement (RSA)
Internet number resources **issued** by ARIN under these policies are subject to a contractual agreement between ARIN and the resource holder. Throughout this document, any and all forms of this agreement, past or future, are simply referred to as the Registration Services Agreement (RSA)."

Policy Statement

Section 3.6.3 - Change paragraph 1 text

FROM:

"This policy applies to every Organization that has a direct assignment, direct allocation, or AS number from ARIN"

TO:

"This policy applies to every Organization that has Internet number resources issued by ARIN"

Policy Statement

Section 3.6.3 Continued:

RESULT:

"This policy applies to every Organization that has **Internet number resources issued by** ARIN (or one of its predecessor registries) or a reallocation from an upstream ISP. This includes but is not limited to upstream ISPs and their downstream ISP customers (as defined by NRPM 2.5 and 2.6), but not reassignments made to their downstream end user customers."

Policy Statement

Section 4.2.2 - Replace text as follows:

FROM:

"All ISP organizations without direct assignments or allocations from ARIN qualify for an initial allocation of up to a /22, subject to ARIN's minimum allocation size.

All ISP organizations without direct allocations, direct assignments, re-allocations or reassignments automatically qualify for a /24. These organizations are exempt from requirements of showing the efficient utilization of previously held IPv4 space. These organizations may qualify for a larger than a /24 by documenting how the requested allocation will be utilized within the request size specified in 4.2.4.3.

ISPs holding re-allocations and/or reassignments must show the efficient utilization of their resources consistent with the requirements in sections 4.2.3 and 4.2.4. "

TO:

"All ISP organizations without any IPv4 addresses from ARIN automatically qualify for an initial allocation of a /24. ISPs providing a 24-month utilization plan for the request size specified may receive up to a /22. ISPs holding re-allocations and/or reassignments must show the efficient utilization of their resources consistent with the requirements in sections 4.2.3 and 4.2.4. "

Policy Statement

Section 4.3.2 - Change paragraph 1 text

FROM:

"End-user organizations without **direct assignments or allocations** from ARIN qualify for an initial assignment of ARIN's minimum assignment size."

TO:

"End-user organizations without **an IPv4 allocation** from ARIN qualify for an initial allocation of ARIN's minimum allocation size."

Policy Statement

Section 6.5.8 - Change section title

FROM:

"Direct Assignments from ARIN to End-user Organizations"

TO:

"End-user Allocations"

Policy Statement

Section 8.5.4 - Change section text

FROM:

"Organizations without **direct assignments or allocations** from ARIN qualify for transfer of an initial IPv4 block of ARIN's minimum transfer size."

TO:

"Organizations without **an IPv4 allocation** from ARIN qualify for transfer of an initial IPv4 **allocation** of ARIN's minimum transfer size."

Policy Statement

Section 8.5.6 - Change section text

FROM:

"Organizations with **direct assignments or allocations** from ARIN must have efficiently utilized at least 50% of their cumulative IPv4 address blocks in order to receive additional IPv4 addresses. This includes all IPv4 space reassigned to their customers."

TO:

"Organizations with **an IPv4 allocation** from ARIN must have efficiently utilized at least 50% of their cumulative IPv4 address blocks in order to receive additional IPv4 addresses. This includes all IPv4 space reallocated and/or reassigned to their customers."

AC Assessment of Conformance with the Principles of Internet Number Resource Policy

Draft Policy ARIN-2022-12: Direct Assignment Language Update, conforms to the principles of the ARIN Policy Development Process. This draft policy is found to be fair, impartial, and technically sound. Based on community feedback and AC discussion we motion to move ARIN 2022-12: Direct Assignment Language Update, to Recommended Draft. If adopted this policy aims to update the language of Number Policy Resource Manual to remove references to the deprecated term “assignment” and use the term “allocation,” which conforms with current ARIN business practices.

Recommended Draft Policy ARIN-2022-12: Direct Assignment Language Update

Action	Date
Proposal	25 July 2022
Draft Policy	23 August 2022
Revised	3 November 2022
Revised	20 March 2023
Revised	18 July 2023
Revised	2 August 2023
Revised	14 August 2023
Revised	5 September 2023
Revised	29 September 2023
Revised	1 February 2024
Revised	1 March 2024
Revised	20 March 2024
Recommended Draft Policy	21 May 2024

Staff and Legal Review (15 March 2024)

Staff Understanding

We understand that the intent of this Recommended Draft Policy is to update the definition of the terms “Allocation” and “Assignment” in section 2.5 of the Number Resource Policy Manual. Staff recommends that proposed definitions be changed to the following to be more precise and clearer as to the meaning of these terms in reference to ARIN practice and the policies in the NRPM.

Staff and Legal Review (cont.)

In Section 2.5, update the definition of Allocation and Assignment to reflect current practice.

- Allocation – the term allocation refers to a block of IP addresses issued from ARIN directly to customers. These IP addresses may be further reassigned or reallocated accordingly.
- Assignment – this term is no longer used to describe IP addresses issued by ARIN.

Staff and Legal Review (cont.)

Staff suggests that consistent use of the term Allocation when the definition of Allocation is intended, instead of synonyms or other forms of the word, such as “allocated,” will add clarity and precision to the text. For similar reasons, staff recommends eventually making these updates to the entire NRPM.

Implementable as Written? Yes

Impact on ARIN Registry Operations and Services: None

Staff and Legal Review (cont.)

Legal Review: There is no legal objection to proposed language, but as this is the first time that the terminology has been reviewed in many years, Legal notes that use of the term “issued” rather than “allocated or assigned” in Section 2.8 would make the language consistent with the terminology used in the Registration Services Agreement (RSA).

Implementation Timeframe Estimate: Three months

Implementation Requirements:

- Staff training
- Updates to public documentation

Proposal/Draft Policy Text Assessed: 1 March 2024



Policy Impact

This draft policy could potentially harmonize the Number Resource Policy Manual and Registration Services Plan Fee Schedule.

The term "issued" currently used in the Registration Services Agreement (RSA) would match the proposed changes in this draft policy.

Community Feedback

ARIN 52 Feedback

Changing definitions of "allocation" and "assignment" was not supported

- Revised to leave primary definitions

Concern that some language changed impact from "no allocation" to "no IP addresses"

- Reviewed text and updated as appropriate

Community Feedback

Public Policy Mailing List feedback actively solicited in February 2024

- Received supportive comments with language recommendations that were incorporated in 1 March revision
- Received comment that definitions should be changed to reflect a layperson's definition.
 - Revised with new Staff and Legal suggestion for definitions.

Community Feedback

ARIN 53 Feedback – April 2024

- Received supportive comments.
- Clarification questions were asked that were answered by staff.



Questions for the Community

Are you in favor or against implementing this Recommended Draft Policy as written?

Draft Policy ARIN-2023-8: Reduce 4.1.8 Maximum Allocation

Gerry George and Brian Jones



Problem Statement

Current Text (30 September 2024)

4.1.8 waiting times are too long, making justifications untimely by the time a request is met. New entrants to the waiting list are expected to wait three years for their need to be met under current policy, with a waiting list of around 700 at this point.

Data indicates that reducing the current /22 maximum further to a /24 would significantly reduce this waiting period, and further tightening the requirements by replacing the /20 recipient maximum holdings with a /24, and preventing multiple visits to the waiting list queue.

Policy Statement

4.1.8. ARIN Waitlist

ARIN will only issue future IPv4 assignments/allocations (excluding 4.4 and 4.10 space) from the ARIN Waitlist. The maximum size aggregate that an organization may qualify for is a /24.

Organizations which ever held any IPv4 space other than special use space received under section 4.4 or 4.10 are not eligible to apply.

Address space distributed from the waitlist will not be eligible for transfer, with the exception of Section 8.2 transfers, for a period of 60 months. This policy will be applied to all future distributions from the waitlist to include those currently listed. Qualified requesters will also be advised of the availability of the transfer mechanism in section 8.3 as an alternative mechanism to obtain IPv4 addresses.

Waiting list recipients must demonstrate the need for a /24 on an operating network.

This policy will apply to waitlist requests received following the implementation of this policy. Waitlist requests received prior to the implementation of this policy will not be affected.

Policy Statement - (cont.)

In section 4.2.2 replace the sentence:

FROM:

"All ISP organizations without direct assignments or allocations from ARIN qualify for an initial allocation of up to a /22, subject to ARIN's minimum allocation size."

TO:

"All ISP organizations without direct assignments or allocations from ARIN qualify for an initial allocation of a /24."

In section 8.3 Conditions on the source of the transfer, remove this sentence:

"The source entity will not be allowed to apply for IPv4 address space under Section 4.1.8 ARIN Waitlist for a period of 36 months following the transfer of IPv4 address resources to another party."

Policy Statement

PROPOSED UPDATED TEXT (4.1.8 maximum allocation)

4.1.8. ARIN Waitlist

ARIN will only issue future IPv4 assignments/allocation (excluding 4.4 and 4.10 space) from the ARIN Waitlist. The maximum size aggregate that an organization may qualify for is a /24.

Organizations which ever held any IPv4 space other than special use space received under section 4.4 or 4.10 are not eligible to apply.

Address space distributed from the waitlist will not be eligible for transfer, with the exception of Section 8.2 transfers, for a period of 60 months. This policy will be applied to all future distributions from the waitlist to include those currently listed. Qualified requesters will also be advised of the availability of the transfer mechanism in section 8.3 as an alternative mechanism to obtain IPv4 addresses.

Waiting list recipients must demonstrate the need for a /24 on an operating network.

This policy will apply to waitlist requests received following the implementation of this policy. Waitlist requests received prior to the implementation of this policy will not be affected.

Current NRPM Text

4.1.8. ARIN Waitlist

ARIN will only issue future IPv4 assignments/allocation (excluding 4.4 and 4.10 space) from the ARIN Waitlist. The maximum size aggregate that an organization may qualify for at any one time is a /22. Organizations will be able to elect a smaller block size than they qualify for down to a /24. Organizations which hold more than a /20 equivalent of IPv4 space in aggregate (exclusive of special use space received under section 4.4 or 4.10) are not eligible to apply. Address space distributed from the waitlist will not be eligible for transfer, with the exception of Section 8.2 transfers, for a period of 60 months.

This policy will be applied to all future distributions from the waitlist to include those currently listed.

Multiple requests are not allowed: an organization currently on the waitlist must wait 90 days after receiving a distribution from the waitlist or IPv4 number resources as a recipient of any transfer before applying for additional space. ARIN, at its sole discretion, may waive this requirement if the requester can document a change in circumstances since their last request that could not have been reasonably foreseen at the time of the original request, and which now justifies additional space. Qualified requesters will also be advised of the availability of the transfer mechanism in section 8.3 as an alternative mechanism to obtain IPv4 addresses.

Restrictions apply for entities who have conducted recent resource transfers. These restrictions are specified in Section 8 for each relevant transfer category.



Current NRPM Text

4.1.8. ARIN Waitlist

4.1.8.1. Sequencing

The position of each qualified request on the waiting list will be determined by the date it was approved. Each organization may have one approved request on the waiting list at a time.

4.1.8.2. Fulfillment

ARIN will fulfill requests on a first-approved basis, subject to the size of each available address block as address blocks become available for distribution. A timely review of the original request may be conducted by ARIN staff. Requests will not be partially filled. Any requests met through a transfer will be considered fulfilled and removed from the waiting list.

4.1.8.3. Qualification

ARIN staff will evaluate all Waitlist requests against the requirements of otherwise applicable Section 4 policies.



NRPM Text – *Proposed Changes*

4.1.8. ARIN Waitlist

ARIN will only issue future IPv4 assignments/allocations (excluding 4.4 and 4.10 space) from the ARIN Waitlist. The maximum size aggregate that an organization may qualify for at any one time is a /22. ~~Organizations will be able to elect a smaller block size than they qualify for down to a /24. Organizations which hold more than a /20 equivalent of IPv4 space in aggregate (exclusive of special use space received under section 4.4 or 4.10) are not eligible to apply.~~

Address space distributed from the waitlist will not be eligible for transfer, with the exception of Section 8.2 transfers, for a period of 60 months. This policy will be applied to all future distributions from the waitlist to include those currently listed.

NRPM Text – *Proposed Changes*

~~Multiple requests are not allowed: an organization currently on the waitlist must wait 90 days after receiving a distribution from the waitlist or IPv4 number resources as a recipient of any transfer before applying for additional space. ARIN, at its sole discretion, may waive this requirement if the requester can document a change in circumstances since their last request that could not have been reasonably foreseen at the time of the original request, and which now justifies additional space.~~

Qualified requesters will also be advised of the availability of the transfer mechanism in section 8.3 as an alternative mechanism to obtain IPv4 addresses.

~~Restrictions apply for entities who have conducted recent resource transfers. These restrictions are specified in Section 8 for each relevant transfer category.~~

Policy Statement – *Proposed Changes* (Sept 30, 2024)

4.1.8. ARIN Waitlist

ARIN will only issue future IPv4 assignments/allocations (excluding 4.4 and 4.10 space) from the ARIN Waitlist. The maximum size aggregate that an organization may qualify for is a /24.

Organizations which ever held any IPv4 space other than special use space received under section 4.4 or 4.10 are not eligible to apply.

Address space distributed from the waitlist will not be eligible for transfer, with the exception of Section 8.2 transfers, for a period of 60 months. This policy will be applied to all future distributions from the waitlist to include those currently listed. Qualified requesters will also be advised of the availability of the transfer mechanism in section 8.3 as an alternative mechanism to obtain IPv4 addresses.

Waiting list recipients must demonstrate the need for a /24 on an operating network.

This policy will apply to waitlist requests received following the implementation of this policy. Waitlist requests received prior to the implementation of this policy will not be affected.

Proposed Changes

4.1.8. ARIN Waitlist – Proposed text

ARIN will only issue future IPv4 assignments/allocations (excluding 4.4 and 4.10 space) from the ARIN Waitlist. The maximum size aggregate that an organization may qualify for is a /24.

Organizations which ever held any IPv4 space other than special use space received under section 4.4 or 4.10 are not eligible to apply.

Address space distributed from the waitlist will not be eligible for transfer, with the exception of Section 8.2 transfers, for a period of 60 months. This policy will be applied to all future distributions from the waitlist to include those currently listed. Qualified requesters will also be advised of the availability of the transfer mechanism in section 8.3 as an alternative mechanism to obtain IPv4 addresses.

Waiting list recipients must demonstrate the need for a /24 on an operating network.

This policy will apply to waitlist requests received following the implementation of this policy. Waitlist requests received prior to the implementation of this policy will not be affected.

Draft Policy ARIN-2023-8: Reduce 4.1.8 Maximum Allocation

Action	Date
Proposal	26 October 2023
Draft Policy	21 November 2023
Revised	14 February 2024
Revised	30 September 2024

Historical Feedback

In response to community feedback on the Public Policy Mailing List and during ARIN 53, there was overwhelming support for a protection clause as a condition to supporting the policy, as it was felt that a retroactive implementation may be unfair to those currently on the Waiting List.

Additional text provides consideration and protection to those already on the Waiting List to not be retroactively impacted by the policy once it is implemented.

Historical Feedback

Added text, as was suggested by the Community, to provide a level of protection for existing Waiting List requests:

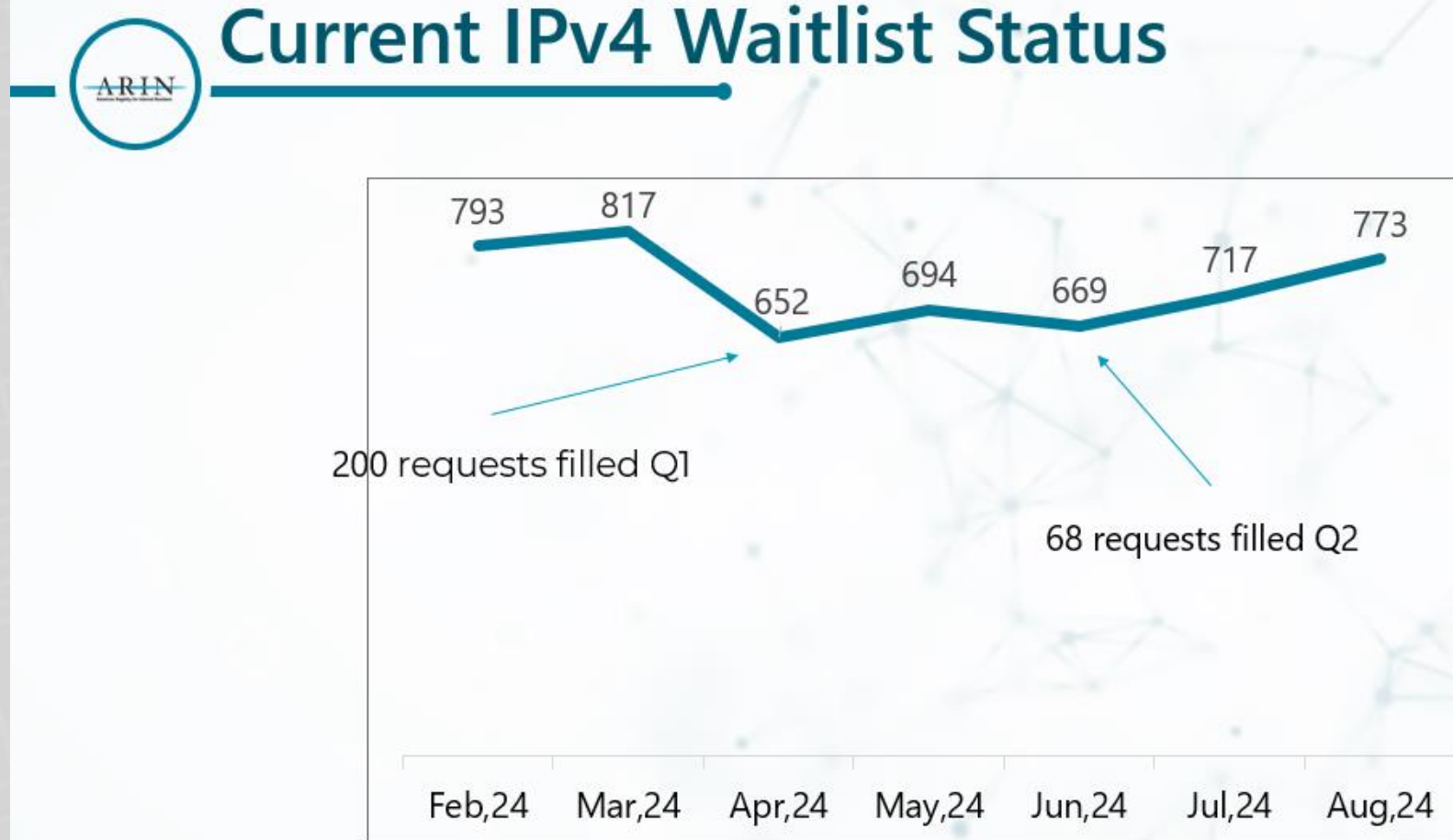
Protection Clause:

- *If policy is adopted with clause, it will ONLY impact new Waitlist entrants.*

Protection Clause - Text Added:

- This policy will apply to waitlist requests received following the implementation of this policy. Waitlist requests received prior to the implementation of this policy will not be affected.

Policy Impact



Data as of 5 September 2024

Policy Impact

Review of "Protection Clause"

"A company joining ARIN's IPv4 Waitlist today should expect to wait at least three years"

"Reducing the IPv4 maximum allocation from a /22 (1,024 addresses) to a /24 (256 addresses) could reduce wait times by almost two-thirds"

- John Sweeting, ARIN CXO - ARIN 52

Waitlist size = 824 (as of 27 September 2024) / 709 (as of 4 October 2024)

Consider the following possibilities:

Do Nothing: There is an approximately 3+ year wait for the existing requests to be completely fulfilled;

Retroactive Protections: Will still require a similar 3-year lead time before the pending requests can be fulfilled, to then move to only satisfying requests for /24s.

No Protections, Immediate Reductions: If reduced to /24 minimum for all requests immediately, there will be a significant reduction in duration of wait times.

Policy Impact

What problem are we trying to solve?

Do Nothing - If this policy is not implemented

- IPv4 Waiting List times will remain at least three years, or continue to increase
- Runout will eventually happen unless organizations return IP addresses or space is returned to ARIN
- The number of transfers and cost of IPs could be impacted

Retroactive Protections - If this policy is implemented (with protection clause)

- The IPv4 Waiting List size would be reduced, but only after a 3-year delay

No Protections, Immediate Reductions - If this policy is implemented (without protection clause)

- The IPv4 Waiting List size would be reduced by two-thirds.

Community Feedback

Proposed additional changes (since 30 September 2024)

Edit for improved grammar:

- Organizations ~~which~~ **that have** ever held any IPv4 space other than special use space received under section 4.4 or 4.10 are not eligible to apply.

Protection Clause Options: Edited for improved grammar

Option A. This policy will apply to waitlist requests received following the implementation of this policy. Waitlist requests received prior to the implementation of this policy will not be affected.

Option B. The limitation to a single /24 will be enforced for waitlist requests submitted after the implementation of this policy. Requests received before the policy change will be evaluated based on the policy in place at the time of the request.

Community Feedback

Proposed additional changes (since 30 September 2024)

Edited for clarity and removal of potential ambiguity to clarify that no exemptions to apply:

- Address space distributed from the waitlist will not be eligible for transfer, with the exception of Section 8.2 transfers, for a period of 60 months.
- This ~~policy~~ **restriction** will be applied to all future distributions from the waitlist to **also** include those **organizations (requesters)** currently listed.
 - *"will not be eligible for transfer, ...for a period of 60 months." is to also apply to those currently on the waitlist, despite the option of the "protection clause" which seeks to not impact their /22 vs /24 requests.*

Community Feedback

Community continues to show (very) strong opinions about this policy

- Reducing the allocation from /22 to /24 will not solve any tangible problem, rather create a new one as /24 is so small even for the smaller organizations that are waiting in order to use it properly to connect people and businesses.
- The proposal may be aiming to reduce anxiety from having to wait too long in the waiting list, but the reality is that there aren't IP addresses left to replenish the pool and has been a fact for a while.
- The wait list is three years long and the justifications are two-year projections. There is a fundamental issue with needs-testing here. Does it matter if the needs-tests are accurate at the time of allocation?
- There is no necessity to revise the policy. **I believe this policy should be abandoned**



Questions for the Community

We are now seeing four feasible options for this Draft Policy:

1. Consider revised policy as written (*with proposed retroactive protections - still 3+ year lag and wait times*);
2. Consider policy without any retroactive protections (*reduction in wait times by two-thirds*);
3. Do away with the Waiting List completely (*new policy would be required*);
4. Abandon the policy (*essentially, do nothing, no changes to current operations*)

Should we keep working on this policy as formulated?

Recommended Draft Policy ARIN-2024-1: Definition of Organization ID/Org ID

Gus Reese and Gerry George



Problem Statement

Current Text (7 February 2024)

During work on a related policy proposal, the NRPM Working Group determined that a definition of Organization Identifier (Org ID) should be included in the NRPM to add clarity to the term and unify NRPM references to match the use of the term in other ARIN publications such as ARIN online.

Policy Statement

Current: None

Proposed:

Section 2.18. Organization Identifier (Org ID)

An Organization Identifier (Org ID) is an identifier assigned to resource holders in the ARIN registry.

AC Assessment of Conformance with the Principles of Internet Number Resource Policy

Recommended Draft Policy ARIN-2024-1 conforms to the principles of the ARIN Policy Development Process. This policy, if adopted, will add clarity to the NRPM by providing a clear definition of an Organization Identifier as section 2.18. It is fair, impartial, technically sound and has received support from the community.

Recommended Draft Policy ARIN-2024-1: Definition of Organization ID/Org ID

Action	Date
Proposal	18 December 2023
Draft Policy	31 January 2024
Revised	7 February 2024
Recommended Draft Policy	21 May 2024

Staff and Legal Review (1 May 2024)

Staff Understanding: This Draft Policy intends to add a clear definition of Organization Identifier (Org ID) to the Number Resource Policy Manual (NRPM). The policy text is clear and understandable.

Implementable as Written?: Yes

Impact on ARIN Registry Operations and Services: None

Legal Review: No material legal issue

Implementation Timeframe Estimate: 3 months

Implementation Requirements: Updates to public documentation

Proposal/Draft Policy Text Assessed: 7 February 2024

Community Feedback - Other Considerations

- Since the policy was in Recommended status, we have received suggestions for the following language that may prove to be more effective
- "An Organization Identifier (Org-ID) is a **unique text label** assigned to **entities that intend to participate in the Internet Numbers Registry System via ARIN registry services.**"
- Newer language has shown to be more well received
- Remember you are showing hands for the policy as written
- Please come to the microphones for yes or no

Policy Impact

Defining the term Organization Identifier in the Number Resource Policy Manual, which currently does not exist.

Questions for the Community



Are you in favor or against this policy as written?

Draft Policy ARIN-2024-6: 6.5.1a Definition Update

Kendrick Knowles and Doug Camin



Problem Statement

Current Text (3 May 2024)

Section 2.4 of the NRMP defines “A Local Internet Registry (LIR) is an IR that primarily assigns IP addresses 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.” This statement differs from the intention of section 6.5.1a that allows section 6 to use LIR and ISP interchangeably. This proposal seeks to clarify the text in section 6.

Policy Statement

Change the text from:

The terms ISP and LIR are used interchangeably in this document and any use of either term shall be construed to include both meanings.

to

The terms ISP and LIR are used interchangeably in this **SECTION** and any use of either term shall be construed to include both meanings.

Timetable for Implementation: Immediate.

Draft Policy ARIN-2024-6: 6.5.1a Definition Update

Action	Date
Proposal	3 May 2024
Draft Policy	21 May 2024

Community Feedback

Seems to be mixed views on advancing policy over fixing larger definition entirely as it relates to the distinction between Local Internet Registries (LIRs) and Internet Service Providers (ISPs) in the NRPM.



Questions for the Community

Do you feel the policy change is necessary at this time?

Should the Advisory Council continue working on this policy?

Draft Policy ARIN-2024-8: Restrict the Largest Initial IPv6 Allocation to /20

Liz Goodson and Gus Reese



Problem Statement

Current Text (25 June 2024)

In order to promote aggregation, the NRPM currently allows initial allocations up to a /16. However, the entire IPv6 address space only contains 65536 /16s, and the space allocated to IANA for globally routable purposes only contains 8192 /16s. Therefore, a /16 is a sufficiently large portion of the IPv6 address space that the goal of conservation starts to outweigh the goal of aggregation.

Policy Statement

6.5.2.1b: Replace

"In no case shall an ISP receive more than a /16 initial allocation." with "In no case shall a LIR receive more than a /20 initial allocation."

Timetable for Implementation: Immediate.

Proposed Changes

Current Text:

In no case shall **an ISP** receive more than a **/16** initial allocation.

Proposed Text:

In no case shall **a LIR** receive more than a **/20** initial allocation.

Draft Policy ARIN-2024-8: Restrict the Largest Initial IPv6 Allocation to /20

Action	Date
Proposal	31 May 2024
Draft Policy	26 June 2024



Community Feedback

- "The current policy has been in effect since ARIN-2011-3 was implemented in January 2012. One /16 allocated in over a decade doesn't represent a problem. Instead, it indicates a successful policy that balances the need for justification with the ability to provide substantial allocations."
- "We can discuss of theoretical scenarios on how to justify it [a /16 allocation], but there is no going around the fact that that's extremely wasteful and unnecessary."
- "I'm in the wait and see camp."

Community Feedback

- "When it comes to smallish blocks, the desire to enable aggregation and smaller routing tables outweighs concerns about address conservation. However, I believe that once we're talking about blocks larger than a /20, conservation concerns outweigh routing table concerns."
- "Nibble boundaries offer two valuable characteristics in IPv6:
 - First, it simplifies reverse DNS delegation since ip6.arpa is implemented on nibble boundaries.
 - Second, it makes it easier to understand written IPv6 addresses and subnets, since the subnet boundary always occurs between written digits instead of causing those digits to change."

Policy Impact

This draft policy would reduce the maximum initial IPv6 allocation size from a /16 to /20.

The term ISP will be replaced with 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. LIR is common nomenclature for all Regional Internet Registries and is used throughout section 6.



Questions for the Community

Do you support the draft policy as written?

If not, can the policy be changed so you would support it? What change(s) do you support?

Should the community continue to work on the policy or abandon it?

Draft Policy ARIN-2024-10: Registration Requirements and Timing of Requirements With Retirement of Section 4.2.3.7.2

Alicia Trotman and Daniel Schatte



Problem Statement

Current Text (13 September 2024)

Registration is central to the value provided by ARIN to the community. Registry quality depends greatly upon the timely registration of reassignments from ISPs to end users. The motivation for registration has waned since the depletion of the free pool. Registration remains vital to a number of stakeholders, including law enforcement and network operators.

This proposal aims to modernize the registration-related policies in Section 4 by introducing language that is meant to remind ISPs of the importance of registration when feasible for the benefit of the community.

Policy Statement

REPLACE: Section 4.2.3.7.1

Original Text:

"Each IPv4 reassignment or reallocation containing a /29 or more addresses shall be registered via SWIP or a directory services system which meets the standards set forth in section 3.2."

New Text:

"Each IPv4 reassignment or reallocation containing a /29 or more addresses shall be registered via a directory services system which meets the standards set forth in section 3.2, within 14 days."

Policy Statement

RETIRE: Section 4.2.3.7.2 - Reassignments and Reallocations Visible Within Seven Days

RENAME: 6.5.5.1 from "Reassignment Information" to "Reassignment and Reallocation Information".

Timetable for Implementation: Immediate.

Draft Policy ARIN-2024-10: Registration Requirements and Timing of Requirements With Retirement of Section 4.2.3.7.2

Action	Date
Proposal	17 July 2024
Draft Policy	20 August 2024
Revised	13 September 2024

Staff and Legal Review (30 September 2024)

Staff Understanding:

Staff understands that this policy will eliminate the outdated term of SWIP in section 4, and simplify the language to use directory services, which includes SWIP and Whois. This draft policy will combine sections of 4.2.3.7.1 and 4.2.3.7.2 into a single section, further simplifying the policy text. It also extends the time to publicly report IPv4 reassignments and reallocations from seven days to 14 days. This draft policy is not clear on the timing being calendar days. If this policy is adopted, staff would implement it as 14 calendar days to maintain consistency with the previous policy and current practice.

This draft policy also changes the title of section 6.5.5.1 to include IPv6 Reallocations, aligning it with current staff practices. Staff suggests updating additional text in section 6 to remain consistent with the proposed changes to section 4.

Staff and Legal Review (cont.)

Section 6.5.5.2 outlines that reassignments and reallocations are to be reported within seven calendar days. This introduces differences in reassignment and reallocation requirements for holders of IPv4 (14 days) and IPv6 (7 days), which could lead to confusion for customers holding both IPv4 and IPv6. Staff recommends updating section 6.5.5.2 to 14 calendar days, being consistent with the proposed change in section 4.2.3.7.1.

Also of note, section 6.5.5.1 uses the terms SWIP and distributed service while the proposed revision to 4.2.3.7.1 uses directory services system. Staff recommends using directory services system to be consistent with revised section 4.2.3.7.1.

Staff and Legal Review (cont.)

Implementable as Written?: Yes

Impact on ARIN Registry Operations and Services: None

Legal Review: No material legal issue

Implementation Timeframe Estimate: 3 Months

Implementation Requirements:

- Staff Training
- Updates to public documentation
- Updates to internal procedures and guidelines

Community Feedback

Limited community feedback has been provided thus far.

Policy Impact

- This draft policy would eliminate the outdated term of SWIP and simplify the language in Section 4 to use directory services, which includes SWIP and Whois.
- This draft policy changes the title of section 6.5.5.1 to include IPv6 Reallocations.
- Section 4.2.3.7.2 - Reassignments and Reallocations Visible Within Seven Days, is retired.
- In addition, this draft policy would lengthen the time to publicly report IPv4 reassignment and reallocation from seven days to 14 days.



Questions for the Community

Do you support this policy as written?

Should the Advisory Council continue to work on this draft policy?

Should this policy also include changes to section 6 to align the policy text in section 4 as suggested by the Staff and Legal Review?