



4.1.8 Potential Policy Actions

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Background



The ARIN Board of Trustees suspended grants from the 4.1.8 waiting list on January 15 2019 due to concerns about the veracity of the justifications for larger blocks and subsequent "flipping" behavior by organizations that had recently been granted blocks from said waiting list.

The ARIN Advisory Council was advised of this action at its annual Face to Face meeting on January 25th 2019.

The AC immediately began curating a list of possible policy actions in order to stimulate discussion.

Background



After the Board's meeting minutes were published, a discussion ensued on PPML, including a proposal from the Community as early as February 8th.

The AC published its menu of possible policy actions on March 7th.

Subsequent and complementary proposals ensued.

Problem Statement



What is the best action, or combination of actions, to take in order to minimize opportunities for windfall profits and incentives to manipulate or make misrepresentations to registration services related to ARIN NRPM's Section 4.1.8 Waiting List?

Overview



This presentation is a review of the AC's possible policy action menu as posted to PPML in March.

Actions that are associated with an in-play policy proposal are color-coded green with a plus afterwards, [like this +](#)

Actions that the AC considered to be suboptimal choices (the community may disagree and in fact has disagreed on at least one occasion!) are color-coded with a minus afterwards [like this -](#).

Actions that have neither garnered a proposal nor the hairy eyeball are left in plain black-and-white text.



Ready? Let's go!

Overarching concern: what to do with already-enqueued waitlist entries?



Do we use the new policy as a forcing function?

Do we grandfather pre-existing entries?

If an org takes a haircut on what they can get from the waiting list, what happens to the remainder? Do they lose it? Should they be able to turn it into a preapproval for 8.3?

4.1.8 space to be held in a “replenishment pool” for 4.4/4.10 (or similar)



Possibly provides a way for ARIN to serve the "small" members of the community by creating a larger pool of small blocks that could be used for these new entrants.

Sends the wrong message about the future of IPv4.

Distribute 4.1.8 space with a one time issuance surcharge attached



In other words, ARIN attaches a fee (still less than market rate) to IPv4 number resources received from the 4.1.8 waiting list.

Possibly more fair than putting it on the market

Likely prices out “organizations that are otherwise unable to participate in the market” which is a constituency that some have advocated serving.

Make 4.1.8 space non-transferrable (must return to ARIN)



Does this mean “no 8.2 as well” or just “no 8.3”?

Might turn transfers into off-books LOAs and rentals – bad for whois accuracy

Still, reduces incentive for fraudulent application with a notion of profiting on it.

Risk of underground market may not be so high as some suppose

Longer holddown period for transfer after receiving 4.1.8 space +



Might turn transfers into off-books LOAs and rentals – bad for whois accuracy

Still, reduces incentive for fraudulent application with a notion of profiting on it.

Risk of underground market may not be so high as some suppose

Not injurious to organizations that are getting waitlist space in order to use it.

A hold-down period of 24 months is proposed in ARIN-2019-6

Only one 4.1.8 application / grant per applicant



No getting back in line

Increases friction but spinning up new corporate entities is trivial

Higher impact on staff than on those trying to game the system

Sends a good message about new entrants

No 4.1.8 resources for any existing IPv4 number resource holder



Variant of “no getting back in line” (previous)

Increases friction but spinning up new corporate entities is trivial

Sends a good message about new entrants

Additional officer attestation at time of being placed on waiting list



Out of purview of the Public Policy Process since it does not relate directly to number resources, but “consider discussing implementing this with Counsel” may be supplemental suggestion to the Board along with other proposals.

May not reduce fraud by much

May increase hook-surface for proving bad behavior (ask Counsel)



Reduce Maximum Allocation for 4.1.8 waitlist +

General action – subsequent slides go into more specifics

Widely believed to be part of any comprehensive solution

Allows more organizations to be served by cutting the cake into smaller pieces, lessens impact of “loophole” applications

Some otherwise deserving organizations may not be able to get all the space they can justify (regardless of how long they are willing to wait)

Reduce Maximum Allocation for 4.1.8 waitlist

Maximum Allocation = /24



Serves the most applicants

Maximally reduces fraud incentive, particularly if combined with one grant per organization

Maximizing grant events / interactions with Registration Services increases ability to discern patterns of activity by bad actors.

RIPE is discussing doing this. See RIPE-2019-02: Reducing IPv4 Allocations to a /24.

Maximizes the number of organizations that get less space than they can justify.

Reduce Maximum Allocation for 4.1.8 waitlist

Maximum Allocation = /22 +



Substantially no questionable applications at this level *under today's policies*.

Able to serve a greater diversity of organizations that could justify larger than a /24.

RIPE's experience with /22s should be considered, while keeping in mind that we are *not* discussing getting rid of needs-basis, so the "enormous flood of shell LIRs" problem is less likely for ARIN.

Changing the maximum allocation to a /22 is proposed in ARIN-2019-2

Reduce Maximum Allocation for 4.1.8 waitlist

Maximum Allocation = /21 or /20



Still substantially no questionable applications at this level *under today's policies*.

At up to 16x the payout (vs. a /24), the incentive for loopholing behavior is still high, even if cut down by a factor of 16 (vs. a /16).

Consensus in AC discussions was that this merely moves the goalposts.

No longer issue 4.1.8 space -



In practice this means “continue the 4.1.8 suspension indefinitely”.

Functionally equivalent to eliminating the waiting list.

At the (surprisingly high) rate at which ARIN gets space back, this will eventually result in a non-trivial amount of space “stranded” at ARIN.

ARIN Stops Accepting Applications for 4.1.8 space -



Closes down entry side of 4.1.8, not issuance side.

Functionally equivalent to eliminating the waiting list.

At the (surprisingly high) rate at which ARIN gets space back, this will eventually result in a non-trivial amount of space “stranded” at ARIN.

Prioritize “not for profit” organization applications -



... potentially to the detriment or exclusion of others

Such status is an artifact of tax laws, says nothing about size or budget

“non-profit” status and “good works” should not be conflated

Difficult to implement across service region – being Canada/US-centric is poor practice

Return to Waiting List Business As Usual -



Unwind suspension of 4.1.8 suspension and resume issuance

The Board, having suspended the policy in the first place, would likely remand any proposal along these lines that managed to make it past the Community, absent truly overwhelming support

~~Distribute 4.1.8 space via the transfer market -~~ Distribute 4.1.8 space via the transfer market +



Question of how proceeds would be distributed (Education and outreach? Reduction of fees? Other stuff in line with ARIN's mission?)

The AC thought the optics and externalities were sufficiently poor that this would never get community support.

Nevertheless, there were multiple statements on PPML that the free pool was dead and ARIN should just sell the addresses.

Distribution of reclaimed addresses in an orderly fashion via the transfer marketplace is proposed in ARIN-2019-7

Reduce maximum allocation for 4.1.8 waiting list to a /19 or /20 -



Considered to only move the goalposts incrementally.

On the cusp of where questionable activity happens under current policy.

Minor inconvenience to bad actors without sufficiently minimizing the profit motive.

Summary



Current Wait List Queue – what to do?

Returned Space = Replenishment Pool

Issuance Surcharge

Make All 4.1.8 Blocks Non-Transferrable

Longer Hold-Down Period +

Only one application per applicant

No application for v4 resource holders

Additional Attestation

Reduce Maximum Allocation

- to a /24
- to a /22 +
- to a /21 or /20
- to a /18 or /19

No longer reissue 4.1.8 space -

Stop accepting applications for 4.1.8 space -

Prioritize Non-Profits -

Business As Usual -

Distribute Space Via Transfer Market +



???

Thank you.

Any Questions?



Discussion

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Business As Usual -

Distribute Space Via Transfer Market +