Draft Policy 2019-3

Update 4.10 – IPV6 Deployment Block

Shepherds: Alicia Trotman and Owen Delong

ARIN 2019-3 Problem Statement

- ARIN staff has noted that the current 4.10 policy is causing problems in its implementation.

- The current policy specifies a /28 minimum. However, ARIN can only allocate a /24 as its minimum size. ARIN's current tools only support a minimum of /24 for reverse DNS.

ARIN 2019-3 Problem Statement

- The current RPKI landscape is also an impediment to using smaller block sizes. Furthermore, a /28 practically is unrouteable, so an organization if they were to receive a /28 would be unable to functionally interoperate with most IPv4 end points, for applications which were noted examples in the original policy.

ARIN 2019-3 Updated Text

ARIN shall allocate a contiguous /10 from its last /8 IPv4 allocation from IANA. This IPv4 block will be set aside and dedicated to facilitate IPv6 deployment. Allocations and assignments from this block must be justified by immediate IPv6 deployment requirements. Examples of such needs include: IPv4 addresses for key dual stack DNS servers, and NAT-PT or NAT464 translators. ARIN staff will use their discretion when evaluating justifications.

This block will be subject to a minimum and maximum size allocation of /24. ARIN should use sparse allocation when possible within that /10 block.

In order to receive an allocation or assignment under this policy:

1.   the applicant may not have received resources under this policy in the preceding six months and cannot receive more than a /21 under this policy section;

2.   previous allocations/assignments under this policy must continue to meet the justification requirements of this policy;

3.   previous allocations/assignments under this policy must be utilized to at least 80% to obtain an additional allocation or assignment;

4.   the applicant must demonstrate that no other allocations or assignments will meet this need.

4

ARIN 2019-3 Changes to Current Text

- Changes the first paragraph from:

"When ARIN receives its last /8 IPv4 allocation from IANA, a contiguous /10 IPv4 block will be set aside and dedicated to facilitate IPv6 deployment. Allocations and assignments from this block must be justified by immediate IPv6 deployment requirements. Examples of such needs include: IPv4 addresses for key dual stack DNS servers, and NAT-PT or NAT464 translators. ARIN staff will use their discretion when evaluating justifications."

TO:

"ARIN shall allocate a contiguous /10 from its last /8 IPv4 allocation from IANA. This IPv4 block will be set aside and dedicated to facilitate IPv6 deployment. Allocations and assignments from this block must be justified by immediate IPv6 deployment requirements. Examples of such needs include: IPv4 addresses for key dual stack DNS servers, and NAT-PT or NAT464 translators. ARIN staff will use their discretion when evaluating justifications."

ARIN 2019-3 Changes to Current Text

- ## Changes the second sentence from:

"This block will be subject to a minimum size allocation of /28 and a maximum size allocation of /24. ARIN should use sparse allocation when possible within that /10 block."

TO:

"This block will be subject to a minimum and maximum size allocation of

/24. ARIN should use sparse allocation when possible within that /10 block."

ARIN 2019-3 Changes to Current Text

- Changes to condition#1 from:

" the applicant may not have received resources under this policy in the preceding six months;"

TO:

" the applicant may not have received resources under this policy in

the preceding six months and cannot receive more than a /21 under this

policy section."

ARIN 2019-3 Changes to Current Text

- Changes to condition#3 from:

"previous allocations/assignments under this policy must meet the utilization requirements of end user assignments:"

TO:

" previous allocations/assignments under this policy must be

utilized to at least 80% to obtain an additional allocation or assignment;""

ARIN 2019-3 Changes to Current Text

- Condition # 5 is completely removed from the proposed text:

Condition #5

"on subsequent allocation under this policy, ARIN staff may require applicants to renumber out of previously allocated / assigned space under this policy in order to minimize non-contiguous allocations."

ARIN 2019-3 Summary

- Raises the minimum size to a /24 and limits total amount an organization can receive to a /21.

- Removes the requirement for return and renumber

- clarifies the utilization requirements by placing them directly into 4.10 rather than a reference to the utilization requirements of end users.

???
Thank you.
Any Questions?

Discussion