



Recommended Draft Policy ARIN-2021-3

Private AS Number and Unique Routing Policy Clarifications

Chris Tacit, Advisory Council Shepherd



History

- Proposal (ARIN-prop-298) 1 July 2021
 - https://www.arin.net/participate/policy/proposals/2021/ARIN_prop_298_orig/
- Draft Policy 20 July 2021
 - https://lists.arin.net/pipermail/arin-ppml/2021-July/068512.html
- Revised 13 December 2021
 - https://lists.arin.net/pipermail/arin-ppml/2021-December/069358.html
- Revised 7 March 2022
 - https://lists.arin.net/pipermail/arin-ppml/2022-March/069426.html
- Recommended 22 March 2022
 - https://lists.arin.net/pipermail/arin-ppml/2022-March/069504.html

Shepherds: Chris Tacit, Joe Provo



Problem Statement

- At ARIN 47, staff identified three points of potential confusion with current text in NRPM Section 5:
 AS Numbers.
- "Sites that do not require a unique AS Number should use one or more of the AS Numbers reserved for private use."
 - Some customers are not aware that their need for unique AS Numbers depends upon their need (or lack thereof) to interconnect with other organizations' Autonomous Systems.
- "In order to be assigned an AS Number, each requesting organization must provide ARIN
 with verification that it has one of the following...A unique routing policy (its policy differs
 from its border gateway peers)...A multihomed site."
 - Few customers qualify for AS Numbers under the "unique routing policy" requirement,
 because they don't understand what "unique routing policy" actually means in practice.



Problem Statement

- "AS Numbers are issued based on current need. An organization should request an AS Number only when it is already multihomed or will immediately become multihomed."
 - All ARIN delegations are based on current needs, and some customers aren't aware they
 need network plans when they request AS Numbers. Additionally, clarification that some
 organizations may have a unique need for an AS Number outside of utilizing a unique routing
 policy, such as one implemented using, for example, a protocol such as Border Gateway
 Protocol (BGP).



Policy Statement

Replace

"Sites that do not require a unique AS Number should use one or more of the AS Numbers reserved for private use."

with

"If a unique AS Number is not required for a given network design, one or more of the AS Numbers reserved for private use should be utilized."



Policy Statement

Replace

"In order to be assigned an AS Number, each requesting organization must provide ARIN with verification that it has one of the following

- A unique routing policy (its policy differs from its border gateway peers)
- A multihomed site"

with

"In order to be assigned an AS Number, each requesting organization must provide ARIN with verification that it requires a unique routing policy, such as a plan:

- To originate announcement of IP Number Resources via an accepted protocol (such as Border Gateway Protocol) from an AS Number different than that of its upstream provider;
- To multihome a site with one or more Autonomous Systems; or
- To use an AS Number to interconnect with other Autonomous Systems."



Policy Statement

Replace

"AS Numbers are issued based on current need. An organization should request an AS Number only when it is already multihomed or will immediately become multihomed."

with

"AS Numbers are issued based on current need, as set out in this section 5."



Staff and Legal Review (25 January 2022)

Staff Understanding

ARIN-2021-3 adjusts language throughout NRPM Section 5 to clarify unique routing policy scenarios under which customers qualify for an Autonomous System Number (ASN), as well as common network and documentation requirements involved in ASN request approvals.

Grammatically, staff suggests replacing "...a unique routing policy, such as, for example a plan..." with "...a unique routing policy, such as a plan..." for clarity.

The Draft Policy text is clear and understandable, and staff believes it will ease some cases where confusion has arisen in the past.



Staff and Legal Review (25 January 2022)

Implementable as Written?: Yes

Impact on ARIN Registry Operations and Services:

None.

Legal Review:

There are no material legal issues that exist with this proposed policy; however, for clarification, legal suggests editing the first proposed replacement text to 'If a unique AS Number is not required for a given network design, one or more of the AS Numbers reserved for private use should be utilized.'



Staff and Legal Review (25 January 2022)

Implementation Timeframe Estimate: 3 months

Implementation Requirements:

- Staff training
- Updates to public documentation
- Updates to internal procedures and guidelines
- Restricting waitlist space from use in these scenarios

Proposal/Draft Policy Text Assessed: https://lists.arin.net/pipermail/arin-ppml/2021-December/069358.html



Update to Language (22 March 2022)

Staff and Legal wording suggestions have been implemented



Questions for the Community

Is the intent of the policy clear enough?

Anything else?





Discuss!