ARIN's Minimum Allocation Size

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The 3 Previous Proposals

2002-3: Multihomed entities without prior assignment can receive a justified /21-/24, but must return all PA addresses w/in 3 mos.

2002-7: Multihomed entities having an AS number can receive a justified /21-/24

$400.00 per year for /23 - /24
$1000.00 per year for /21 - /22

2002-9: Any entity can receive a justified /21-/24

Proposal Status

2002-3:

Authors invited to analyze feedback and rewrite the proposal

Authors re-introduced proposal copy, but decided to abandon their effort because of lack of ppml-list support

ARIN staff published new text to ppml-list because of prior support

2002-7:

Author invited to collaborate with 2003-7 and/or rewrite proposal

After no response from authors and due to similarity with 2003-7, AC recommended abandoning proposal

2002-9:

Abandoned for lack of support during ARIN X

Current Proposal 2002-3

If an end-user is not multi-homed, the minimum block of IP address space assigned by ARIN is a /20. If assignments smaller than /20 are needed, end-users should contact their upstream provider.

If an end-user is multi-homed, and has an ARIN assigned ASN, the minimum block of IP address space assigned by ARIN is a /22. If assignments smaller than a /22 are needed, end users should contact their upstream provider.

Rationale 2002-3

Many end-user organizations are choosing to multi-home for reliability reasons. At the same time, many are using technologies such as NAT, or load balancers that reduce the need for external IP space. These groups are forced today to take one of two actions:

Use IP space from one of their upstreams on both connections. This can lead to load balancing issues, and also makes the end-user more dependent on the ISP who assigned the space. The ISP's business problems, for instance could force downtime and/or renumbering.

"Waste" address space (often by not using the technologies that conserve it) in order to qualify for a /20 under the current policy.

In order to allow people to both conserve address space, and reap the benefits of multi-homing the minimum size assignment for those who do multi-home should be made smaller.

Issues

Does multihoming matter?

Is load balancing from a single provider a problem?

Is provider dependency a real problem?

Why /22? Was proposed at /24…. Compromise?

Prudent bit boundary migration has been a theme… is it needed? /21 too little and /24 too much?

Will this policy create a 'rush for space'?

Will route tables or operations be impacted?
123k paths now….could we tolerate another ?k
Will providers uniformly move their filters?