

AfriNIC-3

Cairo, 11 December 2005

Policy Working Group

Introduction

- Policies that AfrinIC uses to manage internet number resources are proposed by the community
- Anyone can make a proposal through the policy working group discussion list:
 - policy-wg@afriNIC.net
 - policy-wg-request@afriNIC.net
- *Discussion for at least 30 days on the mailing lists*
- *Discussion at a face to face open policy meeting, consensus and board approval*

Proposals under discussion

<http://www.afrinic.net/docs/policy.htm>

<i>Policy</i>	<i>Date Proposed</i>	<i>Proposed by</i>
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<i>More than 30 days on mailing list</i>		
PI/Direct Assignments to End-Users afpol-v4eu200504	16.04.2005	Mark Tinka
Temporary Address Assignments afpol-tmpal200504	16.04.2005	Alain Aina
Change to the ASN assignment criteria afpol-chgasn200508	16.04.2005	Mark Tinka
IPv6 IANA to RIR allocations afpol-glbipv6200508	01.08.2005	Alan Barrett
<i>Less than 30 days on mailing list</i>		
4-Byte ASN policy proposal	01.12.2005	Geoff Huston

Key Points from each Proposal

PI/Direct Assignments to End-User Organizations and Critical Infrastructure (IXPs, etc):

- **Minimum IPv4 PI Assignment: = /24**
- **Criteria necessary to receive a /24 PI assignment:**
 - **EITHER: Show existing utilization of at least /25 from an upstream ISP**
 - **OR: Show an immediate need of at least 50% of the total space required (as specified in request template)**
- **Additional PI Assignment Requests:**
 - **Show that 25% of previous assignment was utilized immediately**
 - **Show that at least 50% was utilized within 1 year**

PI/Direct Assignments to End-User Organizations and Critical Infrastructure (IXPs, etc) *...continued...*

■ ***Critical Infrastructure:***

- ***Afrinic will assign IP addresses to critical internet operations infrastructure like IXPs, ICANN-sanctioned DNS root, and ccTLDs operators (and gTLDs? Inconsistency in proposal).***
- ***Such assignments will come from IP blocks allocated for this purpose.***
- ***These assignments cannot be smaller than /24***
- ***Afrinic will make a list of these assignments and blocks publicly viewable in the Afrinic whois database.***

PI/Direct Assignments to End-User Organizations and Critical Infrastructure (IXPs, etc) ...*continued*...

- ***Known objections:***
 - Increase in routing table size if many small allocations are made.

Temporary address assignments:

- **Afrinic will assign IP addresses for entities requiring them for a certain period of time (usually one month or less).**
 - **Document the temporary activity**
 - **Publish the activity, say, online**
 - **Agree to return the numbers once the activity is finished**
 - **Commercial use of the numbers prohibited**
 - **Afrinic may charge administrative fees**

Temporary address assignments:

■ Known objections:

- One month may be too short
- Should allow use by commercial conferences.
- Should also allow temporary experimental use.
- Possibility for malicious use of space during periods when it is not officially in use
- Possibility of abuse during one period of use causing blacklisting which affects future users of the same space.
- Users should get space from upstream provider.

Change to the Criteria for ASN assignments:

New Criteria:

A requesting organization must meet the following:

- **Organization must be an Afrinic member in good standing. (*new criterion*)**
- **A unique routing policy, OR**
- **Must be multihomed, OR**
- **Plan to be multihomed immediately after receiving the ASN.**

Refer to handouts for details of old criteria.

Change to the Criteria for ASN assignments

- **Known objections:**
 - **Should not have to pay USD 400 per year just for an AS number**
- **Rebuttal:**
 - **Annual membership fee for AS-number-only is currently USD 50 per year.**

Allocation of IPv6 Address Space by the Internet Assigned Numbers Authority (IANA) to the Regional Internet Registries:

- IPv6 unit of allocation from IANA to RIR is a /12
- IANA to allocate sufficient IPv6 space to meet the RIR's needs for 18 months.
- IANA to allow the RIRs to apply their own allocation and reservation strategies.
- Each RIR starts with at least /12 of Ipv6 space.
- Receive additional /12 if “AVAILABLE SPACE” is less than 50% of a /12, OR less than “NECESSARY SPACE” for next 9 months.
 - *Please see handout for additional information*

Allocation of IPv6 Address Space by the Internet Assigned Numbers Authority (IANA) to the Regional Internet Registries:

- ***AVAILABLE SPACE = Currently free addresses***
 - + Reservations expiring during the following 3 months***
 - Fragmented space (smaller than minimum allocation)***
- ***NECESSARY SPACE for a specified period =***
 - Average number of addresses allocated monthly during the past 6 months***
 - * Length of specified period in months***

Allocation of IPv6 Address Space by the Internet Assigned Numbers Authority (IANA) to the Regional Internet Registries:

- *If special needs will change rate of allocation, RIR may calculate **NECESSARY SPACE** according to projection and special facts, instead of according to previous 6 months average.*
 - *Submit detailed justification*
 - *If IANA does not have clear reason to question the RIR's projection, the special needs projection shall be considered valid.*
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- *Please see handout for additional information*

4-Byte ASN Policy Proposal

■ Introduction

- As you may know, the currently available ASN numbers are 2-byte (16-bit ASNs).
- Range of these ASNs is 1 – 64,511
- ASNs 64,512 – 65,553 are reserved for private networks.
- According to recent studies, this ASN pool will most likely be depleted before the year 2010.

4-Byte ASN Policy Proposal ... *continued...*

■ ***Solution:***

- ***Increase the number of bits used to define ASNs from 16 to 32 (or bytes from 2 to 4).***
- ***This extends the available number of ASNs to approximately 4 billion***
- ***For further details about how the new 4-byte ASN specification, please see the IETF internet draft document `draft-ietf-idr-as4bytes-12.txt` :***

<http://www.ietf.org/internet-drafts/draft-ietf-idr-as4bytes-12.txt>

4-Byte ASN Policy Proposal ... *continued...*

■ *Proposal:*

- *Proposal suggests 3 dates for transition from the 2-byte to the 4-byte ASNs by AfrinIC*

On 1 January 2007 the registry will process applications that specifically request 4-byte only AS Numbers and allocate such

AS Numbers as requested by the applicant. In the absence of any specific request for a 4-byte only AS Number, a 2-byte only AS Number will be allocated by the registry.

4-Byte ASN Policy Proposal ... *continued...*

On 1 January 2009 the registry will process applications that specifically request 2-byte only AS Numbers and allocate such AS Numbers as requested by the applicant. In the absence of any specific request for a 2-byte only AS Number, a 4-byte only AS Number will be allocated by the registry.

On 1 January 2010 the registry will cease to make any distinction between 2-byte only AS Numbers and 4-byte only AS Numbers, and will operate AS number allocations from an undifferentiated 4-byte AS Number allocation pool.

ENDS

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