4-Byte AS number registry
Policy Proposal

[LACNIC Proposal 2006-04]

Geoff Huston
APNIC
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32-bit AS number registry

• A policy proposal for LACNIC to assist in the general transition to the use of 32 bit AS numbers

• Essential attributes of this policy:
  – **Ease** of transitional arrangements
  – **Predictability** of registry actions
  – **Clear dates** in terms of registry actions
Why Now and not Later?

- Triggered by the completion of the IETF 4-Byte AS Number proposal* to Proposed Standard publication and predictions of effective exhaustion of the 16-bit AS number pool**
- Proposes to provide a 3 year period of transition to support piecemeal testing and deployment of revised BGP versions that support 32-bit AS numbers

* draft-ietf-idr-as4bytes-12.txt

** variously estimated to occur between 2010 and 2012
Assumptions

• The IANA actions as specified in the IETF 4-Byte AS Number document will be completed by 1 January 2007

• LACNIC will have ensured that its data systems are 32-bit ‘clean’ for the AS Number registry by 1 January 2007
The ASN Registry Proposal

Proposed AS assignment transition in 3 phases:

1. Commencing on 1 January 2007 the registry will process applications for 32-bit only AS numbers\(^1\) upon specific request. 16-bit only AS numbers\(^2\) will be assigned by default.

2. Commencing on 1 January 2009 the registry will assign 32-bit only AS numbers\(^1\) by default. 16-bit only AS numbers will be assigned upon specific request\(^2\).

3. Commencing on 1 January 2010 the registry will assign from the extended AS number space\(^3\).

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1 – AS numbers in the range 65,536 – 4,294,967,295
2 – AS numbers in the range 0 – 65,535
3 – AS numbers in the range 0 - 4,294,967,295
This proposal does NOT:

1. Introduce any extensions to the private AS number space
2. Define any documentation-use AS numbers
3. Advocate the continuation of any 2-byte AS number ‘legacy pool’ beyond 1 January 2010
4. Create policies that extend beyond 1 January 2010
5. Require LACNIC to undertake any RIR-coordinated actions
6. Define a different AS number allocation practice for registry operations