# 4-Byte AS number registry **Policy Proposal**

#### [LACNIC Proposal 2006-04]

http://lacnic.net/documentos/lacnicix/LAC-2006-04-EN.pdf

**Geoff Huston APNIC** 25 May 2006



## 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



<sup>\*\*</sup> variously estimated to occur between 2010 and 2012

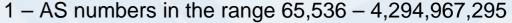
#### Assumptions

- 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<sup>1</sup> upon specific request. 16-bit only AS numbers<sup>2</sup> will be assigned by default
- 2. Commencing on 1 January 2009 the registry will assign 32-bit only AS numbers<sup>1</sup> by default. 16-bit only AS numbers will be assigned upon specific request<sup>2</sup>
- 3. Commencing on 1 January 2010 the registry will assign from the extended AS number space<sup>3</sup>



<sup>2 -</sup> AS numbers in the range 0 - 65,535

3 - AS numbers in the range 0 - 4,294,967,295



#### This proposal does NOT:

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

