Policy proposal 2010-02
Allocations from the last /8

Philip Smith

Alain Bidron

Objectives

- Thinking for the future in the context of IPv4 depletion
- Ensure that no organization during the coming transition to IPv6 lacks IPv4 routable addresses
  - Solution for new and existing LIRs

Context

- A merged proposal from proposals 2008-06 (P. Smith) and 2009-04 (A. Bidron)

  - Taking into account the common objective and feed back from the community
  - Trying to keep it simple

Description of the proposal

- Implementation

  When the RIPE-NCC is reduced to the equivalent of a /8 or less of IPv4 address space.

- Criteria

  - Criteria to receive allocation according to the allocation policy in effect in the RIPE-NCC region at the time of application

  - LIRs must already have received an IPv6 allocation from the RIPE-NCC or an upstream LIR

  - Only applicable to LIRS and for IPv4 PA resources

- Size

  - Uniform size /22
  - Only one allocation per LIR.

Unforeseen circumstances

- A /16 is reserved for future uses
- If the /16 remains unused in the time the remaining /8 has been distributed it returns to the pool to be distributed

Arguments and main points

- Proposal to allocate addresses based on needs
- Uniform size a /22 sufficient for the purpose of IPv6 transition
- Consistent with the current number of LIRS in the RIPE region.
  - /22 gives 16 000 possible allocations
  - Currently 6800 LIRs
  - Gives a possibility to serve existing LIRs and new LIRs for many years.

Questions and issues?

- Why does this apply when the volume of IP addresses held by the RIPE-NCC is restricted to a /8 and not when the RIPE-NCC receives the last /8 from IANA?
  - even if the second option is easier to implement as the trigger is simple why should we use this policy before it is really needed, and LIRs can be served with the volume needed based on the now implemented "Run out fairly" policy ?

- PI are not mentioned is it intentional?
  Yes,
  - the objective is to use these last resources to help ISPs transition not to solve address space needs of end sites.
  - Including PI means potentially introducing requests in the range of
    10 000-20000 and reducing drastically the size of prefixes.
  - Potential side effects in the context of IPv4 depletion – stimulate PI requests and move from PA to PI?