LAC-2006-08 Provider Independent (PI) IPv6 Assignments for End User Organizations

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Summary of Proposal:

This policy is intended to provide a solution for organizations that need IPv6 Provider Independent (PI) assignments.

Typically, such organizations will require the PI assignment to become Multihomed as happens for IPv4, but there may be other reason behind requests. For example, some organizations are not Multihomed, but still need their assignments to be globally routable with stable addressing. They may wish to avoid renumbering if they change the upstream provider. This could be for administrative, policy or security reasons. In such cases, it seems that no other solution than PI assignments would currently be feasible.

Draft Policy Text:

Qualification for an IPv6 Provider Independent (PI) Assignment:

To qualify for a direct assignment, the organization must not be an IPv6 Local Internet Registry (LIR/ISP) and must qualify for an IPv4 assignment or allocation from the LACNIC under current IPv4 policies. This applies whether or not the organization has already been assigned or allocated an IPv4 block.

PI IPv6 Assignment Size to End User Organizations:

The minimum size of the assignment is /48 with a minimal reserve of /44. LACNIC may be able to make a bigger reserve if it considers through documentation offered by the requester that the growing plans may be bigger than a /44. A bigger block (a prefix with less longitude) may be allocated according to LACNIC staff criteria if is conveniently documented and justify by the requester because his operational needs.

Subsequent Assignment Size to End User Organizations:

Whenever possible, further assignments will be made from adjacent address blocks, but only if duly documented and justified.

Assignment 'Super Block':

Assignments will be allocated from a separate 'super block' to allow LIR/ISPs to filter them, if required.

Rationale:

In IPv4, there are organizations that qualify for a PI allocation. This may be because they need either to be Multihomed or have other administrative or technical reasons for needing a portable addressing block.

This is currently not the case for IPv6, and is perceived as a clear barrier for deployment of IPv6 in some organizations. This policy proposal addresses that barrier by means of providing a direct assignment from the LACNIC.

Any organization receiving such an allocation would not be allowed to make further assignments to other external organizations, but instead only to assign subnets internally within their own facilities.

By setting up this policy, we would avoid creating an unfair situation among different regions, and meet the needs of any organization that required PI address space.

Definition of end user-organization. In the frame of this policy it is understood that end user-organization is any organization that are not an LIR or ISP and have one or multiple sites (end-sites).

Multiple organizations legally binds also qualify for these criteria in the case of an aggregation of their networks