

LAC-2007-03 IPv6 Address Allocation and Assignment Policy

Jordi Palet Martinez

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Proposal Title: IPv6 Address Allocation and Assignment Policy

Proposal Version: 2.0

Submission Date: 12 April 2007

Current Status: Review Phase - Open for Discussion

Proposal Type: Modification

Policy Term: Permanent

Summary of Proposal:

This policy modification is intended to provide a solution to the discussions that have taken place over recent years regarding the IPv6 Policy in the RIPE region. It also takes into account changes that have already been adopted in other RIR regions. Furthermore, in some cases, it is also an alternative valid solution to the existing proposal regarding IPv6 Provider Independent (PI) assignments.

There are even well known cases where organizations need to make assignments to the same organization, which is frequently composed of many sites, and may even have its own L2 infrastructure. In other cases, an organization may have a small number of sites but still require their own block, in order to avoid renumbering when changing upstream provider or because they require to be multihomed.

An example of this situation may be a big university with one or several upstream providers, and many campuses and faculties requiring IPv6 addresses. The university needs to be able to assign IPv6 addresses from the same block to many sites and at the same time to be able to use one or several upstream providers. The university network behaves as an internal university ISP to each of the End Sites.

In fact this proposal makes clear an allocation situation to this kind of customers which already is a procedure in the region.

Draft Policy Text:

2.9. End Site

An End Site is defined as an End User (subscriber) who has a business relationship with a service provider that involves:

- that service provider assigning address space to the End User
- that service provider providing transit service for the End User to other sites
- that service provider carrying the End User's traffic
- that service provider advertising an aggregate prefix route that contains the End User's assignment

Proposed replacement text:

2.9. End Site

An End Site is defined as an End User (subscriber) who has a business or legal relationship (same or associated entities) with a service provider that involves:

- that service provider assigning address space to the End User
- that service provider providing transit service for the End User to other sites
- that service provider carrying the End User's traffic
- that service provider advertising an aggregate prefix route that contains the End User's assignment

Existing section 5.1.1.

5.1.1. Initial allocation criteria

To qualify for an initial allocation of IPv6 address space, an organization must:

- a) be an LIR;
- b) not be an End Site;
- c) Document a detailed plan for the services and IPv6 connectivity to be offered to other organizations (clients)
- d) Announce a single block in the Internet inter-domain routing system, aggregating the total IPv6 address allocation received, within a period not longer than 12 months; and
- e) Offer IPv6 services to clients physically located within the region covered by LACNIC within a period not longer than 24 months.

Proposed replacement text:

5.1.1. Initial allocation criteria

To qualify for an initial allocation of IPv6 address space, an organization must:

- a) be an LIR or ISP;
- b) Document a detailed plan for the services and IPv6 connectivity to be offered to other organizations (clients) or their own/related departments/entities/sites to which will assign /48s
- c) Announce a single block in the Internet inter-domain routing system, aggregating the total IPv6 address allocation received, within a period not longer than 12 months; and
- e) Offer IPv6 services to clients or entities own/related (including departments and/or sites) physically located within the region covered by LACNIC within a period not longer than 24 months

Rationale:

a. Arguments Supporting the Proposal: There have been already very clear examples and discussions in the region about the need for this modification. Furthermore in practice in some cases this policy is applied.

The inability to obtain IPv6 address space by some big entities which require it is a clear barrier to the deployment of IPv6. By adopting this policy, we avoid creating an unfair situation among different regions, many of which have already modified the original IPv6 common policy to avoid these barriers, based on experience which was not available initially.

b. Arguments Opposing the Proposal

The possible effect of this proposal is a growth of global routing tables, as naturally can be expected, because new allocations will be possible according to the suggested modifications. In any case this will happen through the PI policy effect already approved in other regions.