

Multiple Editorial Changes in IPv6 Policy

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RIPE79

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Summary

- Editorial, removing unnecessary text
 - “lack of experience”, “potential new changes” ...
- No sense to bother the NCC for evaluating a prefix shorter than /48
 - If you do wrong, audit will tell ...
- Mention of RIPE BCOP-690
- Rewording some text taking advantage of all that

Actual vs Proposed (1)

1.1. Overview

...

This policy is subject to future review and potential revision, subject to continuing experience in the administration of IPv6.

5.4.1. Assignment address space size

End Users are assigned an End Site assignment from their LIR or ISP. The size of the assignment is a local decision for the LIR or ISP to make, using a minimum value of a /64 (only one subnet is anticipated for the End Site).

5.4.2. Assignments shorter than a /48 to a single End Site

When a single End Site requires an assignment shorter than a /48, it must request the assignment with documentation or materials that justify the request. Requests for multiple or additional prefixes exceeding a /48 assignment for a single End Site will be processed and reviewed (i.e., evaluation of justification) at the RIR/NIR level.

Note: There is no experience at the present time with the assignment of multiple network prefixes to the same End Site. Having the RIR review all such assignments is intended to be a temporary measure until some experience has been gained and some common policies can be developed. In addition, additional work at defining policies in this space will likely be carried out in the near future.

1.1. Overview

...

(text removed)

5.4.1. Assignment address space size

End Users are assigned an End Site assignment from their LIR or ISP. The size of the assignment is a local decision for the LIR or ISP to make, using a value of "n" x /64. Section 4.2 of ripe-690 provides guidelines about this.

5.4.2. Assignments shorter than a /48 to a single End Site

Assignments larger than a /48 (shorter prefix) or additional assignments exceeding a total of a /48 must be made based on address usage, or because different routing requirements exist for additional assignments.

In case of an audit or when making a request for a subsequent allocation, the LIR must be able to present documentation justifying the need for assignments shorter than a /48 to a single End-Site.

Actual vs Proposed (2)

5.4.3. Assignment to operator's infrastructure

An LIR may assign a network prefix per PoP as the service infrastructure of an IPv6 service operator. Each assignment to a PoP is regarded as one assignment regardless of the number of users using the PoP. A separate assignment can be obtained for the in-house operations of the operator.

7. IPv6 Provider Independent (PI) Assignment

To qualify for IPv6 PI address space, an organisation must meet the requirements of the policies described in the RIPE NCC document entitled "Contractual Requirements for Provider Independent Resources Holders in the RIPE NCC Service Region".

The RIPE NCC will assign the prefix directly to the End User organisations upon a request properly submitted to the RIPE NCC, either directly or through a sponsoring LIR.

The minimum size of the assignment is a /48. Organisations requesting a larger assignment (shorter prefix) must provide documentation justifying the need for additional subnets.

Additional assignments may also be made when the need is demonstrated and documented based on address usage, or because different routing requirements exist for additional assignments. When possible, these further assignments will be made from an adjacent address block.

Assignments will be made from a separate 'designated block' to facilitate filtering practices.

The PI assignment cannot be further sub-assigned to other organisations.

7.1 IPv6 Provider Independent (PI) Assignments for LIRs

(This section is removed and the following sections are renumbered.)

7. IPv6 Provider Independent (PI) Assignments

To qualify for IPv6 PI address space, an organisation must meet the requirements of the policies described in the RIPE NCC document entitled "Contractual Requirements for Provider Independent Resources Holders in the RIPE NCC Service Region".

The RIPE NCC will assign the prefix to the End User organisations upon a request properly submitted to the RIPE NCC, either directly or through a sponsoring LIR.

Assignments will be made from a separate 'designated block' to facilitate filtering practices.

The PI assignment cannot be further sub-assigned to other organisations.

7.1 IPv6 Provider Independent (PI) Assignment Size

The minimum size of the assignment is a /48.

The considerations of "5.4.2. Assignments shorter than a /48 to a single End-Site" must be followed if needed.

7.2 IPv6 Provider Independent (PI) Assignments for LIRs

(This section is renumbered.)

Rationale

a. Arguments Supporting the Proposal

This proposal supports a regular update of the PDP backed-up with IPv6 deployment experience, reducing the RIPE NCC overhead.

b. Arguments Opposing the Proposal

LIRs could abuse this policy to justify higher needs of IPv6 space.

Counter argument: The Assisted Registry Check (ARC) process (additional allocations) will reveal those cases.

c. Situation in other RIRs

APNIC policy had this requirement <https://www.apnic.net/community/policy/resources#5.2.4.3.-Assignment-of-multiple-/48s-to-a-single-end-site>, however an equivalent policy has reached consensus in the last meeting.

AFRINIC and LACNIC do not have this requirement in their IPv6 policies and recommend an assignment size of a /48

- <https://www.afrinic.net/policy/manual#Allocations-Assignments-Policies> (section 6.5.4.1 Assignment address space size)
- <https://www.lacnic.net/684/2/lacnic/> (section 4.5.3.1 - Assignment address space size)

ARIN policy requires for larger initial assignments to be reasonably justified with supporting documentation, based on the number of sites in an organisation's network and the number of subnets needed to support any extra-large sites. <https://www.arin.net/participate/policy/nrpm/#6-5-4-reassignments-from-lirs-isps>

End Site (actual)

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

KISS

(Keep It Simple Stupid)

End Site (it is a good idea?)

2.9. End Site

An End Site is defined as an End User (subscriber) “location” 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 location
- that service provider providing transit service for the End User location to other sites
- that service provider carrying the End User’s location traffic
- that service provider advertising an aggregate prefix route that contains the End User’s location assignment