

Number:	2006-07
Policy Proposal Name:	Minimum IPv4 Assignment Window
Author:	Leo Vegoda RIPE NCC
Proposal Version:	1.0
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Current Status :	Discussion Phase - Open for Discussion - Extended
Suggested WG for Discussion and Publication:	Address Policy WG
Proposal Type:	Modify
Policy Term:	Permanent
Policy Document to be Affected:	ripe-368: IPv4 Address Allocation and Assignment Policies for the RIPE NCC Service Region
Draft RIPE Document :	n/a

Summary of Proposal:

This proposal suggests the minimum Assignment Window (AW) available to LIRs should be raised from zero (0) to /21 (2048 IPv4 addresses). Because the sub-allocation policy references the AW policy, the sub-allocation policy also needs to be updated. This proposal suggests that the maximum sub-allocation should be kept at /20 (4096 IPv4 addresses).

Draft Policy Text:

a. Current (ripe-368):

An LIR may sub-allocate IPv4 space up to 400% of its Assignment Window (AW) to an organisation every twelve months. Thus, an LIR with an AW of /26 may make a /24 sub-allocation. LIRs with an AW smaller than /26 may not make sub-allocations as the minimum sub-allocation size is /24.

[...]

The maximum size of a sub-allocation is /20 even if this is less than 400% of the

LIR's AW. For example, an LIR with a /21 AW may not sub-allocate a /19 to a downstream network.

[...]

All new LIRs start with an AW of zero (0). This means that every assignment requires prior approval from the RIPE NCC.

b. New:

An LIR may sub-allocate up to an IPv4 /20 (4096 addresses) to a downstream network operator every twelve months.

[...]

All new LIRs start with an AW of /21 (2048 addresses). This means that the LIR needs to request prior approval from the RIPE NCC to assign more than a /21 to a single organisation in a year.

Rationale:

a. Arguments Supporting the Proposal

In 1993 the minimum Assignment Window (AW) was recommended to be /19. Just two years later this was set to zero and the maximum AW to /19, with AWs being set in-line with individual LIRs' needs and experience. Since 1995 the AW policy has slowly been relaxed as LIRs have become more familiar with the RIPE community's policies.

The maximum AW was dropped in 1999 and the time constraint was removed for LIRs' infrastructure assignments in 2001.

The number of RIPE NCC members (LIRs) has grown by about 35% over the last five years. Despite this, the RIPE NCC has not seen a rise in the number of requests sent for approval over this period. Instead, the number of approval requests per LIR, and in absolute terms, have dropped by 17%.

However, there has been a steady increase in the number of requests received for assignments to medium sized networks (/24 - /19). There was a 15% growth in this category between 2001 and 2005.

During this period the RIPE NCC has made significant improvements to the effectiveness of its training services. About 1,000 LIR staff attend RIPE NCC training courses each year. The RIPE NCC has tried to reduce the need for LIRs

to send staff abroad when attending courses, and the number of LIRs doing so dropped by 7% between 2004 and 2005.

While RIPE NCC training materials have always been available from the web site, an e-learning portal was launched in 2005 to provide better access to a wider range of training material. This portal allows LIRs to access training and educational resources at the time and place they choose, and as frequently as they want.

The broadening of access to training about RIPE NCC procedures will be extended in the autumn of 2006 when the LIR Training Course will be webcast and made available through the e-learning portal.

LIRs are also supported through the RIPE NCC's audit service. This service, which is described in ripe-170, aims to promote consistent and fair application of the community's policies as well as identifying procedures that can be improved. The audit process has recently been improved and expanded so that more LIRs are audited.

Accepting this proposal would allow the RIPE NCC to focus more time on audits. It will also allow many LIRs to speed up their provisioning processes. It is not intended to promote larger PA assignments to End Users.

b. Arguments Opposing the Proposal

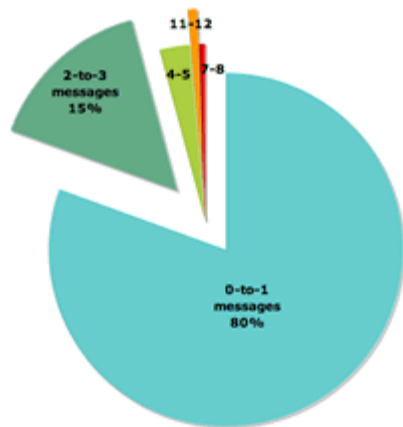
Despite improved training and support activities, a small minority of LIRs do not follow the community's policies. These LIRs would find it more difficult and time consuming to obtain an additional allocation when returning to the RIPE NCC for more IPv4 address space.

LIRs may also need to supervise new staff more closely, as those staff would not need to send as many requests to the RIPE NCC for evaluation.

Additional Supporting Information:

During the [Address Policy Working Group](#) session at RIPE 53, the RIPE NCC was asked to provide statistics showing how many of the requests to make a PA assignment involve discussion with the requester; and how much discussion takes place in those requests. Leo Vegoda gave a [presentation](#) on this.

The RIPE NCC looked at all the tickets where we approved PA assignments of prefixes up to and including /21 during the last three complete months of July, August and September in 2006. This was a set of 1,100 tickets.



This graph illustrates:

- - 80% of requests are approved immediately, or following just one exchange
- - 15% are approved with just two or three

messages being exchanged

- - 4% of tickets involve a significant amount of discussion

Please note: Tickets often include messages that are not directly related to the specific request. For instance, when an LIR is eligible for an additional allocation discussion can also occur on how to register something in the database, or the IP Resource Analyst may remind them about an unpaid invoice.

These figures show that only a small fraction of LIRs need significant assistance with their decision making. The RIPE NCC will be able to dedicate significantly more time to this small group of LIRs if the minimum Assignment Window is raised.

The full table of results:

Exchanges	Tickets
0	673
1	214
2	118
3	48
4	11
5	20
7	6
8	4
11	4
12	2