



Expansion of the initial allocation space for existing IPv6 address space holders

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Introduction

- This proposal will make it possible to expand IPv6 address space for existing IPv6 address holders without satisfying the subsequent allocation requirements.

This proposal has reached a consensus at JPNIC Open Policy Meeting.

Background:

New applicants for IPv6 address

- Organizations currently applying for initial allocations can simply request for a larger space than /32.
 - Thanks to the activities of the RIRs to emphasize that LIRs should be able to request allocations greater than /32 if they have enough IPv4 infrastructure.

Background:

Allocation size for existing LIRs

- When existing address holders applied for IPv6 address, there were psychological barriers requesting a large address space.
 - Based on the idea of the "slow start" in IPv4 policy, many organizations believed it would be difficult to justify all of their address requirements at an initial allocation.
- `PROVISIONAL IPv6 ASSIGNMENT AND ALLOCATION POLICY DOCUMENT' specified the initial allocation size as /35. LIRs which received allocations under this policy were only allowed an upgrade of their allocations to /32.



Current problem

- Existing IPv6 address holders are at a disadvantage compared with new applicants IF they plan to start “real” IPv6 service NOW.



Example situation A:

An existing IPv6 address holder

1. LIR-A got a /32 IPv6 address space two years ago.
2. One year ago, they began IPv6 service trial for 300 customers.
3. They plan to begin commercial service in six months.
4. (I guess) LIR-A cannot expand their address space at this point because they do not satisfy subsequent allocation requirements.
5. (I guess) LIR-A can apply to expand their address space only when their number of customers reaches the required level.



Example situation B:

A new IPv6 address applicant

1. LIR-B will start a commercial service, so they apply for an IPv6 address space for the first time.
2. They can get enough address space for their needs (e.g. /24) if they can show their specific plan.
3. LIR-B can start commercial service with the address /24.



Proposal

- Make it possible to expand the IPv6 address space of existing address holders without satisfying the subsequent allocation requirements if they can show a concrete plan.
 - The same criteria should apply to all organizations requesting an initial allocation larger than /32.



Implementation

- If it is possible to expand the address space under the current practice:
 - Start accepting requests ASAP.
 - May be the same procedure for subsequent allocation (except for checking the criteria)
 - It should be documented clearly (e.g. in the guidelines document).
- NIRs providing IPv6 address allocation service should implement the same procedure.



Mailing list feedback

- Request for clarification of my proposal
- Is this proposal based on real requirements?
 - YES, some LIRs want to expand their address if possible
- Information input from APNIC
 - The APNIC Secretariat has been approached previously and confirmed it.
 - It will be necessary to clarify the current policy.



Summary

- By making it possible to expand the IPv6 address space for existing address holders, all LIRs can have suitable address space for their service
 - New applicants for IPv6 address space
 - Existing IPv6 address holders
- This expansion should be based on the same criteria as for organizations requesting an initial allocation larger than /32