Sparse allocation guidelines for IPv6 resource allocations

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Introduction

- This proposal also requires that the details of any sparse allocation algorithm used for the allocation by APNIC of IPv6 resources must be published on the website.

- Any revisions should be handled inline with the procedures contained within APNIC-112.

Current problem

- IPv6 Allocations are currently based on a 1-2 year timeline while deployment plans are often based on a 5-10 year time-frame.

- Contiguous allocations are not guaranteed.

- Sparse allocation is used operationally, but not mandated by policy.

- The exact algorithm & parameters are not visible to members.

Other RIRs

- Other RIRs make use of sparse allocation to differing degrees.

Proposal

- This proposal seeks to make the following additions/ changes to APNIC policy

1. APNIC must publish the details of any sparse allocation framework used to allocate IPv6 resouces on the APNIC website as a numbered document. Changes to this document should be handled as per APNIC-112 "APNIC document editorial policy".

Benefits/disadvantages

- Advantages:
  - APNIC Members will have visibility of the details of any sparse allocation algorithm used by APNIC to allocate IPv6 resources.

- Disadvantages:
  - There would be a workload increase for the secretariat to document and publish the sparse allocation algorithm details

Implementation

- No change required to current operational procedures is required.

- Secretariat to produce an APNIC document to describe the implementation of the existing sparse allocation system.

- This document will be published via the APNIC website

NIRs

- The policy would apply when NIRs request address space from APNIC
- The proposal allows NIRs to choose when/ if to adopt this policy for their Members.

Summary

- Mandates use of an existing process to give surety to the APNIC membership
- This surety will enable members to plan further into the future
- Requires no operational change to alloation procedures.
- APNIC to publish procedures and consult if changes are required.