APNIC 62

prop-168-v004: Increase to maximum IPv4 delegations

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1. Problem Statement

New account holder applications for resources are plateauing, meaning address space is sitting in the available pool for years while small network operators are required to obtain address space via market transfers or otherwise lease address space.

- Note: Check out https://apnic.thesysadmin.au/ipv4.html for an IPv4 exhaustion graph, which shows the current per-day delegation rate (retrieved from the “delegated-apnic-extended” files on ftp.apnic.net) and is updated daily.

2. Objective of policy change

Allow a sub-set of account holders (those who hold up to an aggregated /22) to receive an additional delegation to bring their total holdings up to /22.

3. Situation in other regions

- The maximum size aggregate a member in the ARIN region may qualify for at any one time a maximum is a /22 [8].

- "The sum of all allocations made to a single LIR by the RIPE NCC is limited to a maximum of 256 IPv4 addresses (a single /24)." [9]

- Exhaustion Phase 2 (section 5.4.3.2) in AFRINIC's Consolidated Policy Manual states that the "maximum will be /22 per allocation/assignment" [10].

- LACNIC's Policy Manual lists under section 11.1.4 "Policies Relating to the Exhaustion of IPv4 Address Space" that the maximum size a new member may receive is a /22, while under 11.1.2 it states that existing members are ineligible for additional space under this policy [11].

4. Proposed policy solution

Changes to APNIC-127 as follows:

- Section 6.1 "Minimum and maximum IPv4 delegations“
  - Members who hold less than an aggregated /22 can apply for space to bring their total holdings up to an aggregated /22, and the conditions on who can request additional space.
  - Any account holders who have transferred space out of their account are ineligible for additional space.

4. Proposed policy solution (cont.)

- References to the “available pool” mean the 103/8 pool as well as any other recovered space not covered by 103/8 (which is treated the same as 103/8).
- IXP, experimental and temporary address space is excluded from the calculation of an account holder’s current holdings.

4. Proposed policy solution (cont.)

- Paragraph 4 note of Section 6.1 "Minimum and maximum IPv4 delegations“
  - A waiting list is to be created once the 103/8 pool has been exhausted.
- Section 11.0 "IPv4 Transfers“
  - Address space delegated from the available pool cannot be transferred for 5 years from the date of the most recent delegation.

4. Proposed policy solution (cont.)

- Paragraph 4 note of Section 6.1 "Minimum and maximum IPv4 delegations“
  - A waiting list is to be created once the 103/8 pool has been exhausted.
- Section 11.0 "IPv4 Transfers“
  - All address space held by an account holder and delegated from the available pool cannot be transferred for 5 years from the date of the most recent delegation.

4. Proposed policy solution (cont.)

- Section 14.0 "Mergers & Acquisitions“
  - Address space delegated from 103/8 cannot be transferred for 5 years from the date of initial delegation.
  - If space has already been subject to a transfer lock, it is not subject to a new transfer lock as a result of being transferred to a different account holder under 14.0.

4. Proposed policy solution (cont.)

- (New) Section 5.1.5 "Reservation for IPv4 to IPv6 Transitioning":
  - A /12 v4 will be reserved for new account holders, who can each receive a /24 for 4-6 translation tech.
  - This space will activate once the available pool has been exhausted, and the /16 reserved under s5.1.1 has been released into the pool and exhausted.
  - This space cannot be transferred and must be returned to the registry when no longer required.
  - Any space under 5.1.5 can be recovered if not used for its intended purpose.

5. Advantages / Disadvantages

- Advantages:
  - Makes space available to existing account holders who require additional address space.
- Disadvantages:
  - Accelerated IPv4 exhaustion.
  - A sudden rush on new applications for resources.

6. Impact on resource holders

No known impacts to resource holders.

7. References

[1] APNIC Delegation Statistics as of 29 July 2026: https://ftp.apnic.net/stats/apnic/2026/delegated-apnic-extended-20260729.gz

[2] Page 22, APNIC 2024 Activity Report: https://www.apnic.net/wp-content/uploads/2025/02/APNIC-AR-2024.pdf

[3] Page 19, APNIC 2023 Activity Report: https://www.apnic.net/wp-content/uploads/2024/02/APNIC_AR_2023.pdf

[4] Page 17, APNIC 2022 Activity Report: https://www.apnic.net/wp-content/uploads/2023/05/APNIC_AR_2022_FINAL.pdf

[5] Page 17, APNIC 2021 Activity Report: https://www.apnic.net/wp-content/uploads/2022/03/APNIC_AR_2021.pdf

[6] Page 18, APNIC 2020 Activity Report: https://www.apnic.net/wp-content/uploads/2021/03/APNIC-2020-Annual-Report.pdf

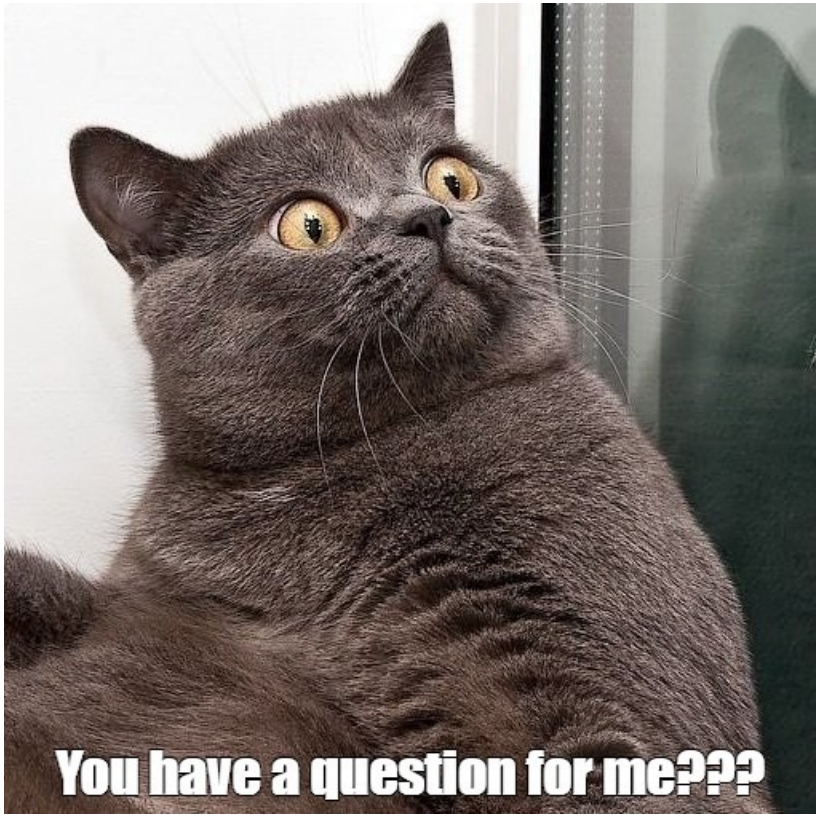
[7] Page 30, APNIC 2019 Activity Report: https://www.apnic.net/wp-content/uploads/2020/02/APNIC-AR-2019-FINAL.pdf

[8] ARIN Waitlist, Number Resource Policy Manual, ARIN: https://www.arin.net/participate/policy/nrpm/#4-1-8-arin-waitlist

[9] Allocations made by the RIPE NCC to LIRs, IPv4 Address Allocation and Assignment Policies for the RIPE NCC Service Region, RIPE NCC: https://www.ripe.net/publications/docs/ripe-826/#51-allocations-made-by-the-ripe-ncc-to-lirs

[10] Soft Landing, Consolidated Policy Manual, AFRINIC: https://afrinic.net/policy/manual#Soft-Landing

[11] Policies relating to the Exhaustion of IPv4 Address Space, LACNIC Policy Manual: https://www.lacnic.net/innovaportal/file/680/1/manual-politicas-en-2-21.pdf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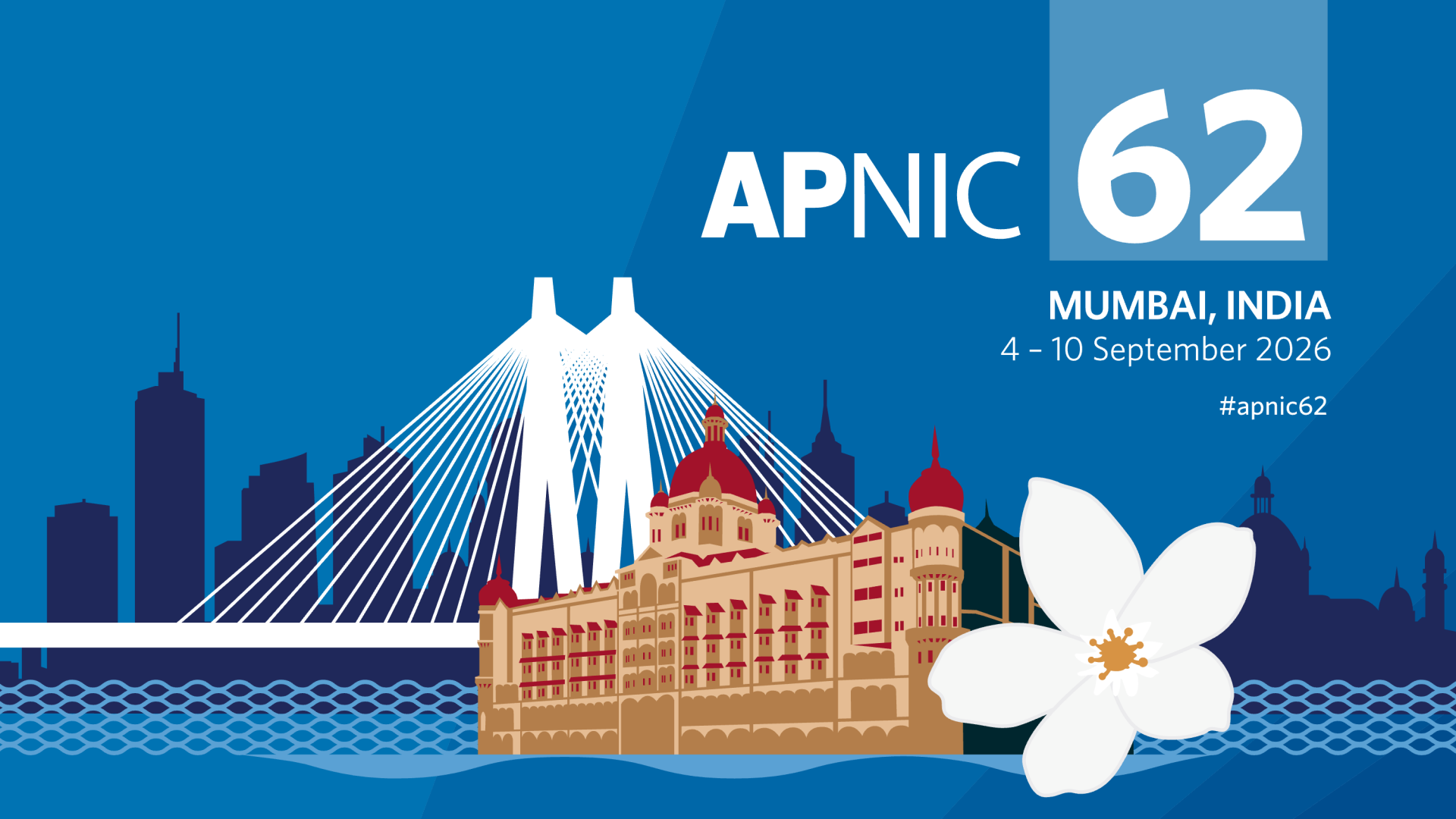
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