RIPE NCC
RIPE NETWORK COORDINATION CENTRE

Feedback from the RIPE NCC Registration Services

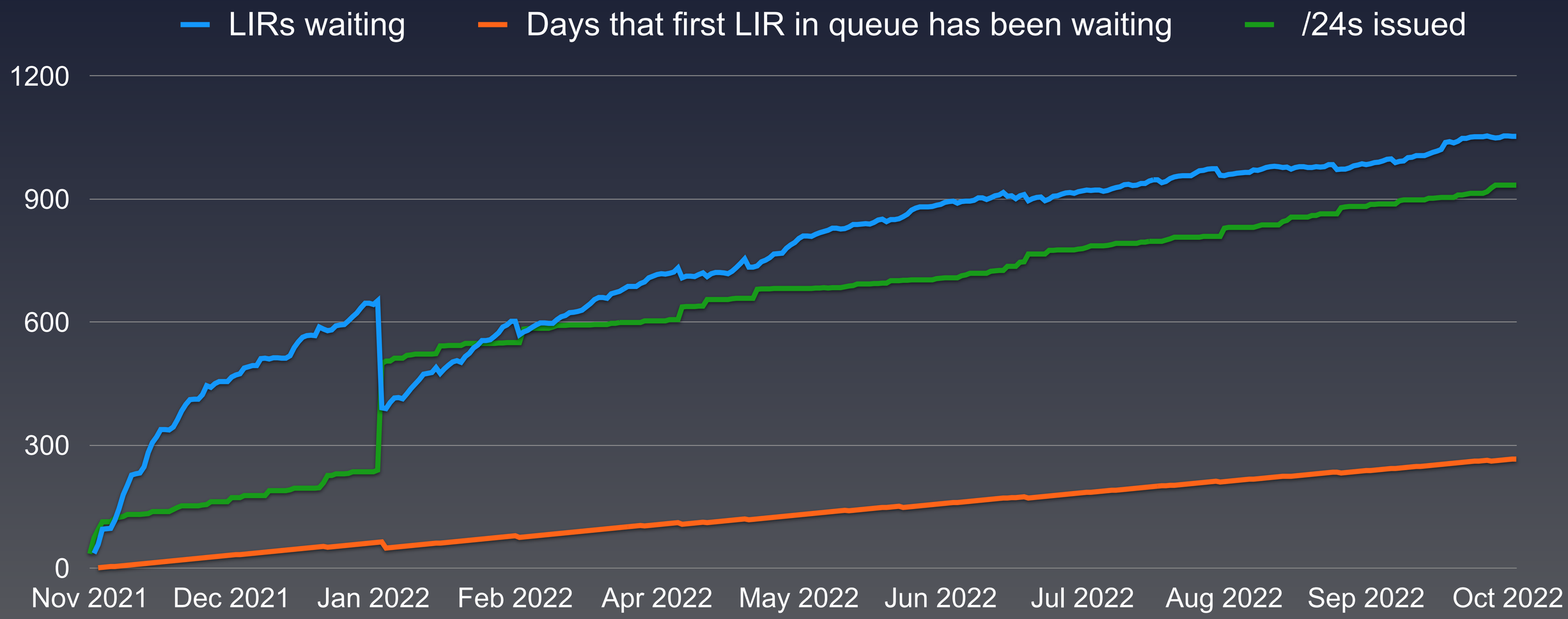
Marco Schmidt | RIPE 85 | 26 October 2022

Overview

- IPv4 Waiting List
- IPv4 IXP pool
- Assignment Definition

IPv4 Waiting List

IPv4 Waiting List



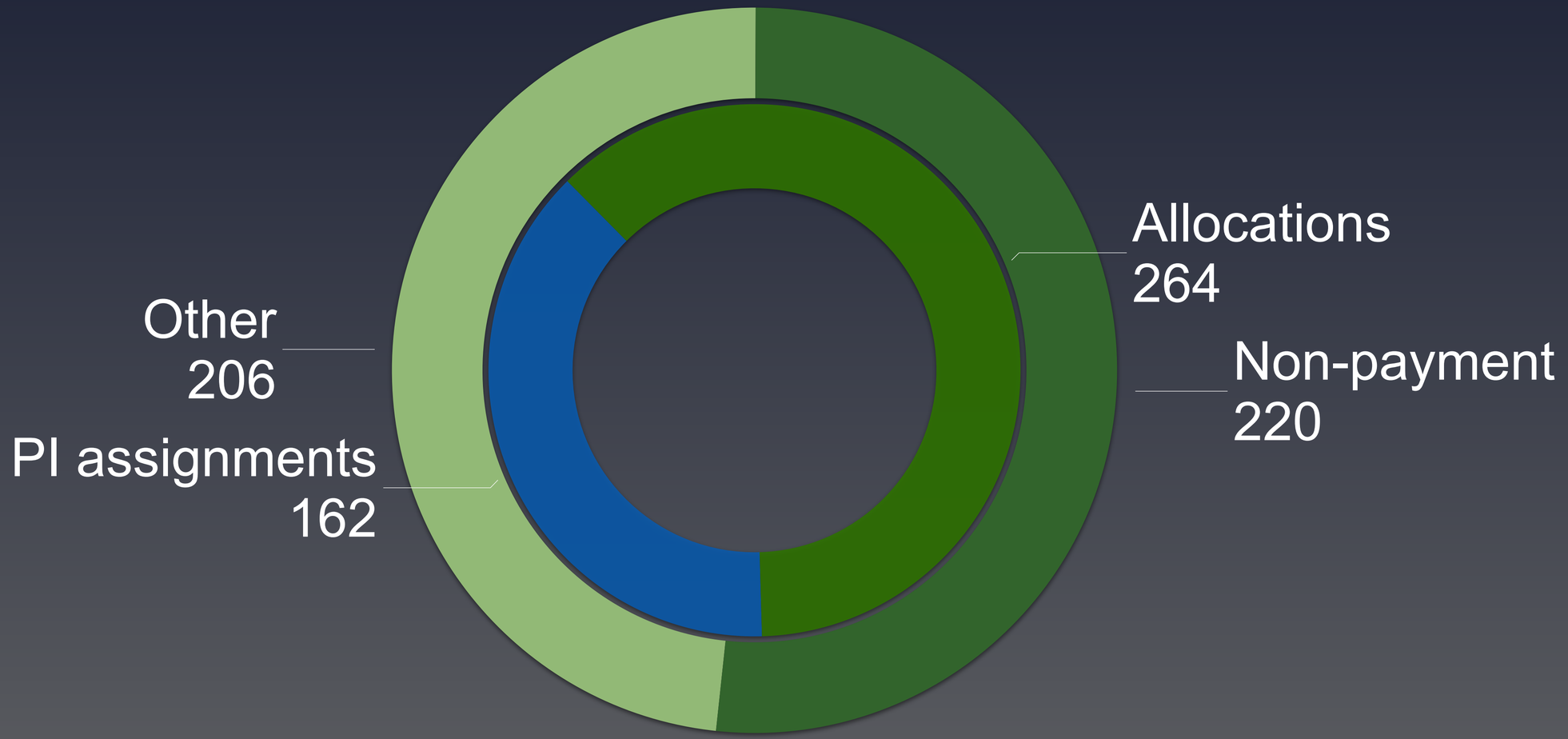
Looking Back

- 934 /24 allocations have been provided since 17 November 2021 (when the waiting list became active again)
- Those currently first in line have been waiting since the end of January 2022
- Within the last five months, we provided allocations to LIRs that joined within one month

Looking Forward I

- In the next six months, we will provide around 426 /24 allocations (our current recycled IPv4 pool size)
- Coming from 88 allocations (~ 264 /24s) + 104 assignments (~ 162 /24s)
- “One-time” effect of de-registration due to non-payment: 220 /24s

Quarantine Pool Composition in /24's

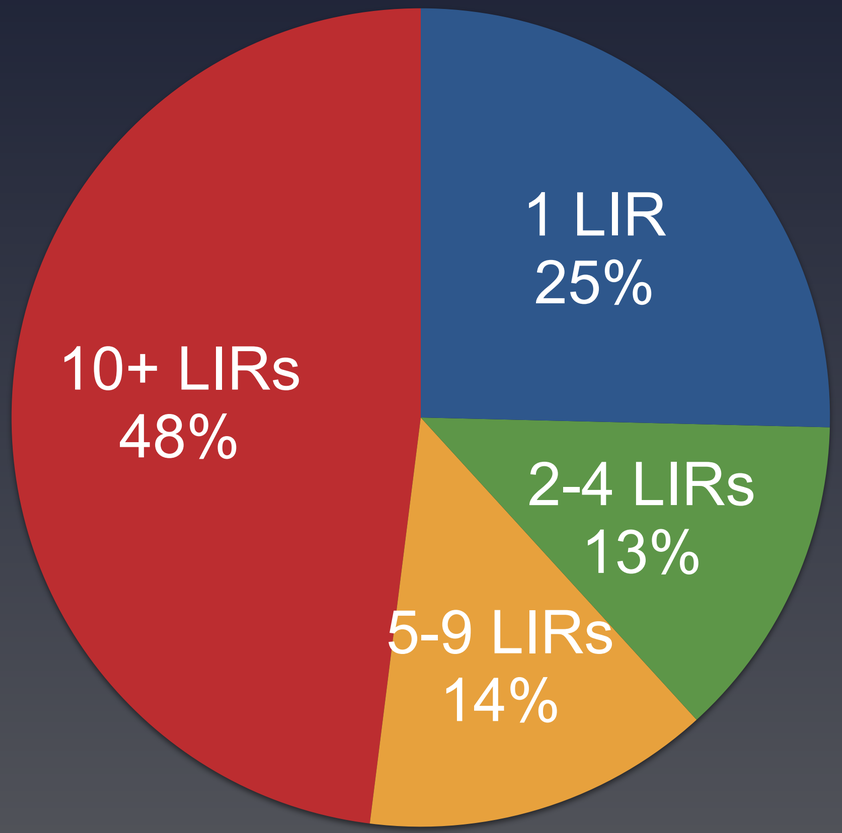


Looking Forward II

- Further allocations depend on future de-registrations of IPv4
- Currently we de-register around 30 /24s per month
- Amount of de-registration will continue to decrease
- Estimated waiting time when joining the waiting list: 24 **months**

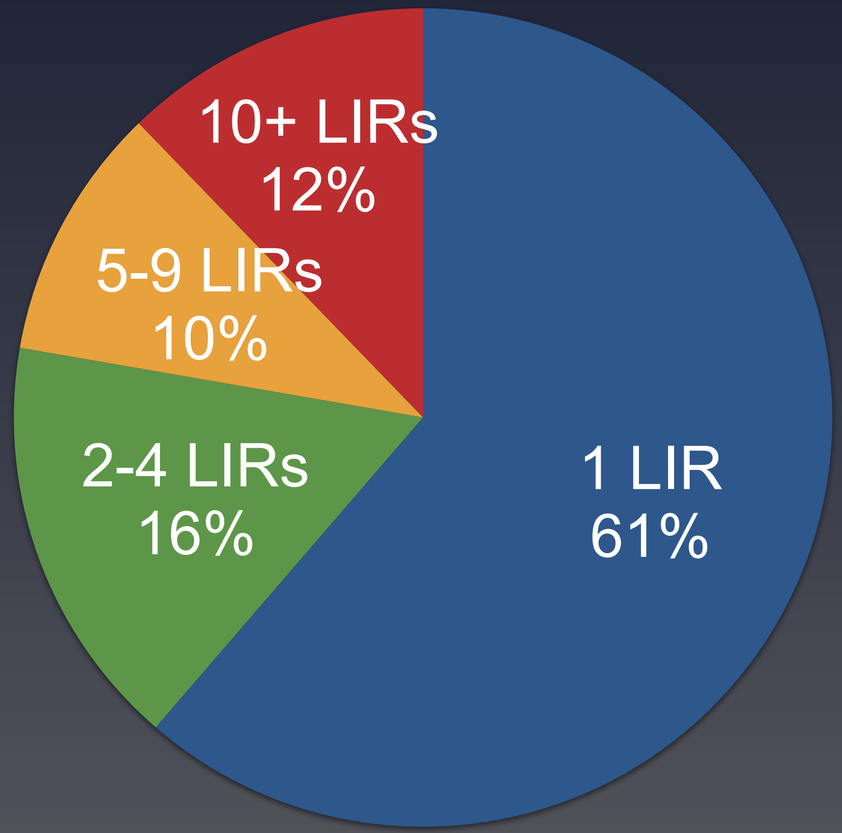
Multiple LIRs on the Waiting List

December 2021



Total waiting: 330

October 2022



Total waiting: 1053

Multiple LIRs

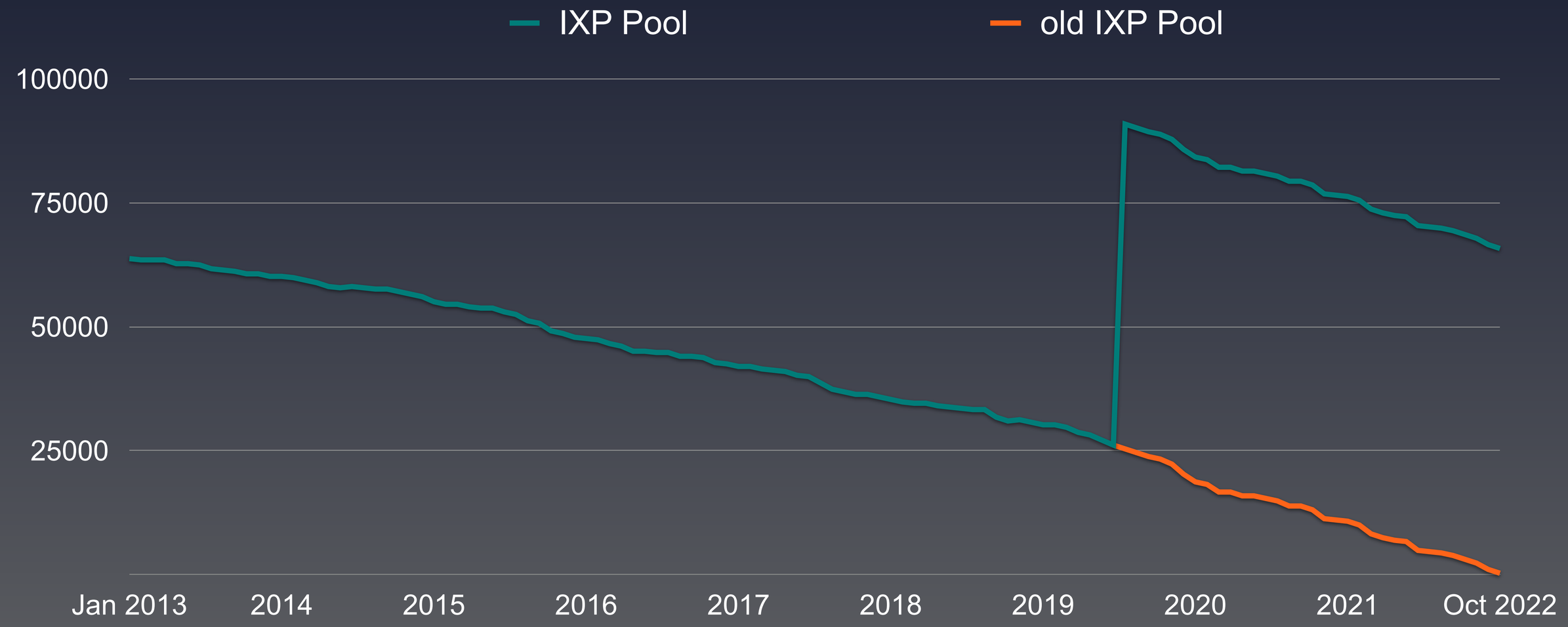
- Share of multiple LIRs is going down but still significant
- Every request from a multiple LIR account delays the provision to real newcomers by 1-2 days
- In earlier discussions there was a general sense that this behaviour is against the intent of the policy, but no further action has been taken
- Accept the situation or propose a change?

IPv4 IXP Pool

Some History

- At RIPE 78 the RIPE NCC reported that the IPv4 IXP pool will only last until 2022 before is depleted
- Proposal 2019-05 resulted in a policy change to add another /16 to the IXP pool

IXP Pool Development



Conclusions

- The policy change was a success
- Currently 224 /24s, 12 /23s and 1 /22 peering LANs
- Estimated IXP IPv4 pool lifetime: ~2029
- RIPE NCC sees a slight increase in request over the last years

- Is the estimated lifetime acceptable?
- Are changes needed to the policy to extend the life time (stricter rules, minimum assignment size)?

Assignment Definition

Policy Discussion in Other Regions

- prop-148: Leasing of Resources is not Acceptable (APNIC)
- LAC-2022-2: Clarification: The lease of resources is not allowed under the policies in force (LACNIC)
- ARIN-2022-9: Leasing Not Intended (ARIN)

- Proposers understanding: It’s only assigning when there is a direct connectivity service, else it’s leasing
- RIPE NCCs long-term understanding: Leasing is not defined, any service relation qualifies for assignments from LIRs to End Users

RIPE Policies

- IPv6 Policy: *“End Users are assigned an End Site assignment from their LIR or ISP.”*
  https://www.ripe.net/publications/docs/ripe-738#assignment

- IPv4 Policy: *“LIRs are allocated Provider Aggregatable (PA) address space. They sub-allocate and **assign this to downstream networks**. **If a downstream network or End User** changes its service provider, […]*
  *ASSIGNED PA: This address space has been assigned to the issuing LIR infrastructure or **an End User for use with services provided by the issuing LIR**.”*
  https://www.ripe.net/publications/docs/ripe-733#7

Questions

- Does the RIPE policies need a differentiation of services provided by the LIRs?
- Is RIPE NCC’s understanding supported by the Working Group?
- Should the IPv4 policy be made more clear anyway?

Questions

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