why-pi:

..let's try this again.

A Policy Proposal (this time)

(maybe not address policy, but here we are, again)

Remco van Mook, RIPE 88, May 2024

“[..]we need to hit the two main criteria of science: we need to graph something and we need to cite something. Like a true academic, the main reference source I will be citing is myself from a few years ago.”

- Explosions & Fire on YouTube

What’s your flavour?

- LEGACY
- ALLOCATED PA
- ASSIGNED PA
- ASSIGNED PI
- ASSIGNED ANYCAST

Think that’s all?

2022: There are 4 TYPOS more common than ‘ASSIGNED ANYCAST’

- ASSIGNED PA **3,953,170**
- LEGACY **143,019**
- ALLOCATED PA **56,216**
- ASSIGNED PI **20,047**
- *Assigned PA **10,114***
- *assigned PA **8,696***
- LIR-PARTITIONED PA **7,334**
- SUB-ALLOCATED PA **4,921**
- ALLOCATED UNSPECIFIED **2,659**
- *assigned pa **2,291***
- *Assigned pa **264***
- LIR-Partitioned PA **136**
- ASSIGNED ANYCAST **50**
- *ASSiGNED PA **32***
- *Assigned Pa **9***
- *ASSIGNED pa **8***
- sub-allocated pa **3**
- *ASSigned PA **2***
- *ASSIGNED Pa **2***
- *assigned Pa **1***
- *aSSIGNED PA **1***
- *ASSIGNED pA **1***

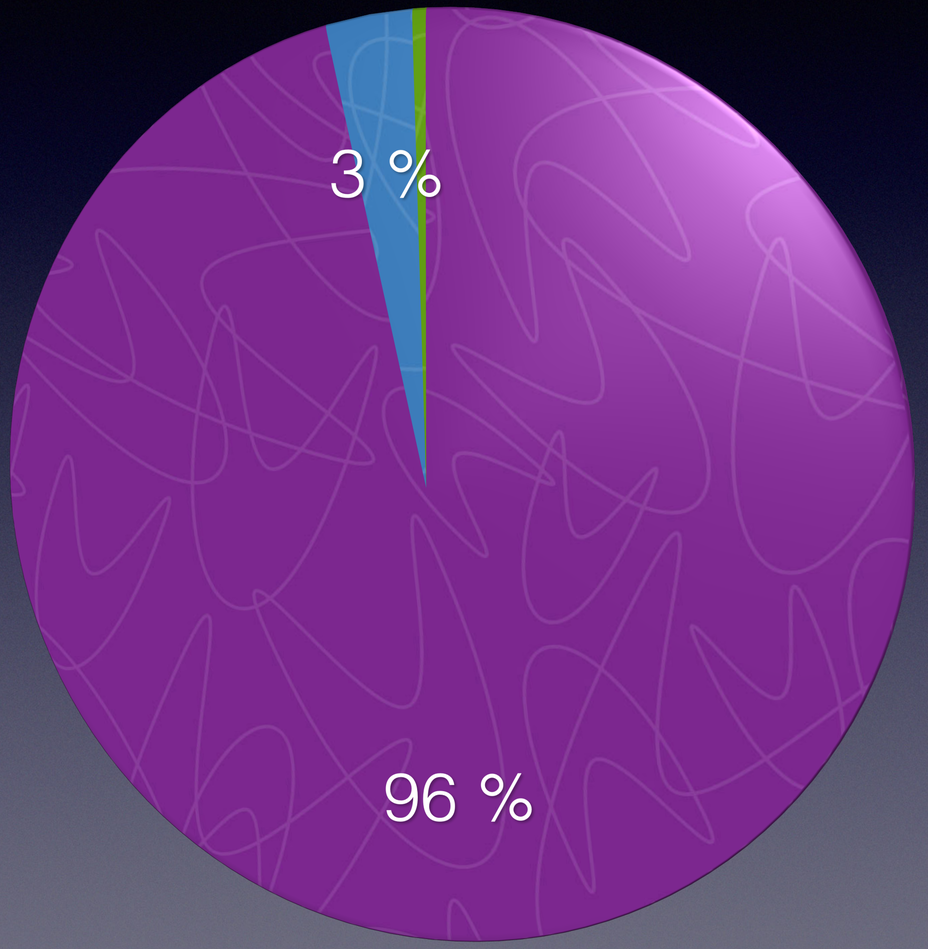
Early 2024: NO MORE TYPOS!

ASSIGNED PA **3,980,975 (+6,383)**
LEGACY **126,828 (-16,191)**
ALLOCATED PA **63,183 (+6,967)**
ASSIGNED PI **19,618 (-429)**
LIR-PARTITIONED PA **8,376 (+906)**
SUB-ALLOCATED PA **9,901 (+4,977)**
ALLOCATED UNSPECIFIED **3,600 (+941)**
ASSIGNED ANYCAST **50 (=)**

Focus on “assigned”

- ASSIGNED PA (3,980,975)
- LEGACY (126,828)
- ASSIGNED PI (19,618)
- ASSIGNED ANYCAST (50)

Helpful Pie Chart



Let’s look at IPv6

2022: There are 2 TYPOS more common than ‘ASSIGNED ANYCAST’

- ASSIGNED **565,004**
- AGGREGATED-BY-LIR **46,127**
- ALLOCATED-BY-RIR **19,070**
- ALLOCATED-BY-LIR **13,266**
- ASSIGNED PI **3,249**
- Assigned **1,553**
- assigned **1,061**
- ASSIGNED ANYCAST **67**
- ALLOCATED-BY-RIR # This block was actually allocated by the IANA **14**
- Aggregated-by-LIR **10**
- allocated-by-lir **7**
- aggregated-by-lir **4**
- Allocated-by-LIR **2**
- Aggregated-by-lir **2**
- ASSIGNEd **1**

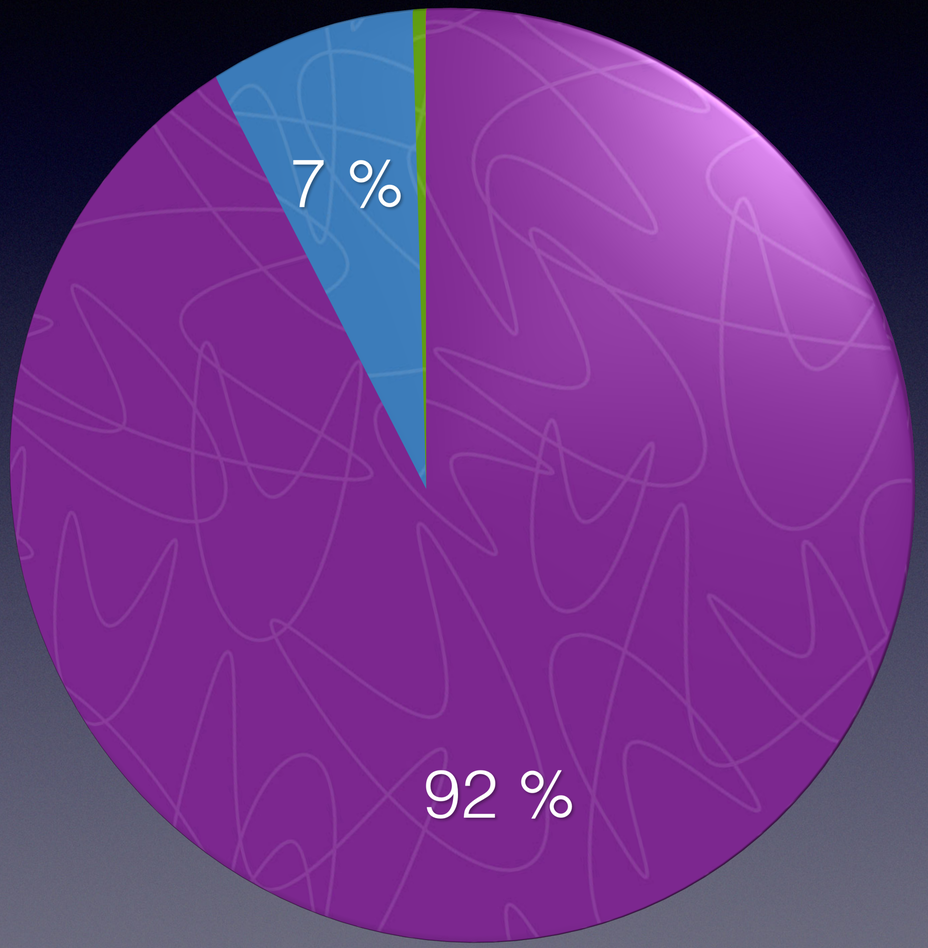
2024: NO MORE TYPOS!

- ASSIGNED **753,662 (+186,043)**
- AGGREGATED-BY-LIR **60,419 (+14,276)**
- ALLOCATED-BY-RIR **22,343 (+3,273)**
- ALLOCATED-BY-LIR **17,507 (+4,232)**
- ASSIGNED PI 3,706 **(+457)**
- ASSIGNED ANYCAST **67 (=)**
- ALLOCATED-BY-RIR # This block was actually allocated by the IANA **14 (=)**

Focus on “assigned"

- ASSIGNED (753,662)
- AGGREGATED-BY-LIR (60,419)
- ASSIGNED PI (3,706)
- ASSIGNED ANYCAST (67)

Another Helpful Pie Chart



How much of this still matters?

Certainly for v4, maybe also for v6?

First law of Kurtis

“If you think you’re special,

you’re probably wrong.”

Allocated?
Sure

(Has this been handed out to a contracted entity?)

Assigned?
Definitely

(Is this in use?)

Legacy?
Probably not

(An admin flag inside the NCC would do the same)

Anycast?
No.

(That’s kind of the point of anycast)

What would we gain?

ALLOCATED || ASSIGNED

Clarity

Consistency

Less room for loopholes

(Much) simpler policy and procedures

Why now?

(Remnants of) address policy define a very rigid model for the RIPE NCC to follow for the structure of its membership, mostly based on rules about the distribution of IPv4.

If we want to give the RIPE NCC membership room to evolve its membership structure based on today's reality we need a clean break with policy and a database that no longer prescribes the RIPE NCC membership model, but rather allows it to accurately reflect reality.

Exact Proposal Text TBD, but..

Types of Address Space

- ALLOCATED: This address space has been allocated to an LIR and no assignments or subsequent allocations made from it are portable. More specific objects may exist in the RIPE database.
- ASSIGNED: This address space has been assigned to an End User. More specific objects do not exist in the RIPE database.
- [AGGREGATED: This address space has been assigned to End Users by an LIR. Each End User has been assigned a block the size of the assignment size in the object. More specific objects do not exist in the RIPE database.]