

# Impersonal ASNs

## Views on Internet Numbers and Diets

\* Using DBs and stuff from 15.08.2024 unless otherwise specified

RIPE NCC Open House: Personal AS Numbers (25.09.2024)

**Radu Anghel** / slides available @ <https://bgp.news/20240925-openhouse/>

\* Definitely not a tutorial on how to register ASNs

# It is not clear what a personal ASN is

- Without a clear definition anybody can claim anything
  - Double standards
- No special tags
  - Except in the “ultimate source of Internet truth”, bgptools
  - No separate pool
  - Registered by both **natural persons** and **companies**
  - Some are **LIRs**
  - Some are projects **sponsored by RIPE NCC Community fund**
- IANA refers to ASNs as “assigned to **network operators**”
  - Can’t we just say ASNs represent networks?
  - With same rights and **responsibilities**





# Educational

- What can't be learned/experimented in a lab/private network using private ASNs?
  - Except 'feeling' the GRT
  - Except dog food
  - Except experiments approved/endorsed by RIPE NCC (or others), and announced in advance
    - \* still, not Banksy
- Large communities + Huawei = <3 (experiment for a new RFC/standard)
  - Could this experiment be done by any ASN?
- Hypothesis: **maybe learning is not the purpose**
- However, assuming it is
  - Not feasible to have \$amount\_of\_CS\_students registering ASNs each year

# Unaddressed issues

- What happens to the end-users if the **LIR deaggregating PA closes?**
- How do you compare numbers between the Michelin star dog food and the rest of the diets?
- **Dog food (59645) vs. loss of income & unhappy customers (32934)**



# Intergalactic Education

- Assuming education is the purpose
  - A lot of them are out of region
  - US, CN, HK, CA, TW
- Is RIPE NCC / the RIPE Service Region educating the whole world?
- **Proof of presence requirements?**
- What is the point of RIRs?

\* **AQ** is in ARIN



# Spaghetti

- Another dietary preference forced upon others
- New: direct ~T1s over spaghetti
- If learning is the purpose, books are a better investment than registering an ASN





# The Lunch Money

- Short sidetrack to the ‘difficult arguments’
  - A company is a company. Not a non-profit.
    - Companies are for profit entities
  - Is advertising unique **Internet Number Resources** to minors a common thing among LIRs or just for the one(s) specifically targeting that group?
  - External evaluations of profits are subjective
    - this is so generous, only **20 coins**
    - RIPE NCC charges **0 coins** for the other thing but they charge **90 coins**
    - this generosity has no use without ‘**additional**s’: VMs, IXP ports
- **Maybe we should stick to the company/non-profit thing**

# Minor problems

- <13
  - GDPR
  - COPPA (for the US-based young net. eng.)
- Should access to the RIPE DB be 18+?
  - Currently there is 18+ content in the DB
- Also, an ASN requires additional stuff
  - IPs
  - Equipment
  - Connectivity x 2

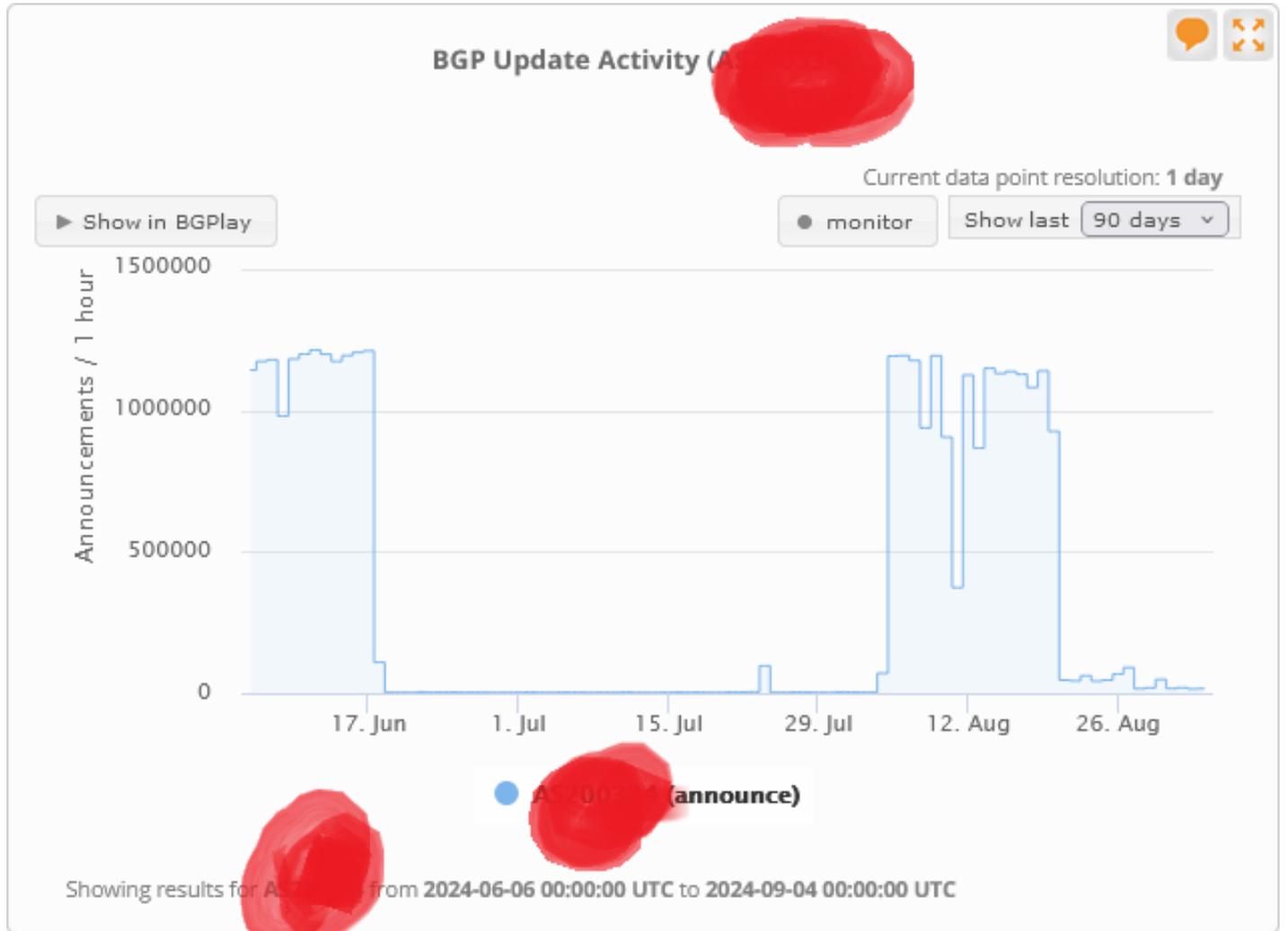


# Global Warming

- One ASN, **more than 300 UPDATES / second**
  - To the DFZ routers
  - To the Route Collectors
- **24/7** for half of August plus June plus plus
  - Today: a modest 8+/second
- Personal ASN
  - Better configured?
  - More filtered? (**RFD** much?)
  - Accurate contact info?
- **Forcing dietary preferences onto others?**



# Global Warming



# Yesterday (the day before today, 24)

- Out of region ASNs:

Region	Assigned	O-o-r
RIPENCC	39336	1731
APNIC	29852	206
ARIN	32717	49
LACNIC	13551	1
AFRINIC	2456	0



- RIPENCC

- deregistered the ‘spamhaus romance story’ ASN
- registered an ASN located somewhere in Canada on the right

# Better connected, better operated



- Better operated, see previous slide.
- What does better connected mean?
  - Short **AS\_PATH**?
  - Lots of peer ASNs?
- Better connected than?
  - Vodafone? KPN?
  
- Random info: dormant companies doing business (registering resources) is tax evasion

# Dietary facts

- If somebody thinks they can't break the Internet with their toys, doesn't mean others can't do it
- Some large providers still do not filter all connections
- Some (e.g. DE-CIX) "avoid" these networks



# Incomplete/fake whois data

- Contact info in the DB is for **operational purposes**
  - Not for sending postcards
  - Phones are the OOB for “I can’t reach your mail server” or other emergency situations
- **‘I don’t want my contacts in the DB’ == ‘I don’t need unique number resources’**
- Fake geofeed:, useless RFC 8805
  - From AQ to KP
  - Alphabet soup: one ASN, 250+ /48s





# Curious case of LIR with N/A

- **Details are not editable by the mnt-by:** for organisation: objects belonging to LIRs
  - org-name:
  - address:
  - phone:
- RIPE NCC approved/endorsed this
  - Anonymous registry 101
  - Can I haz that too pls?



# RIPE DBaaB (Database as a Blog)

- I don't like global warming, and I had an ice cream
  - What is the appropriate way to signal this?
    - In **BGP**? (communities, morse code, etc?)
    - In **whois**? (remarks: of ASN/inet/route obj?)
- poem: objects exist, d'oh
  - **Why not use them then?**



# XSS & SQLi & other html

- Should it be mandatory (or at least recommended) to have one attached to your RIPE DB objects? Just in case.
  - 8 aut-num:
  - 2 domain:
  - 4 inet6num:
  - 5 inetnum:
  - 2 route6:
  - 1 route:
  - **0 poem: !!1**

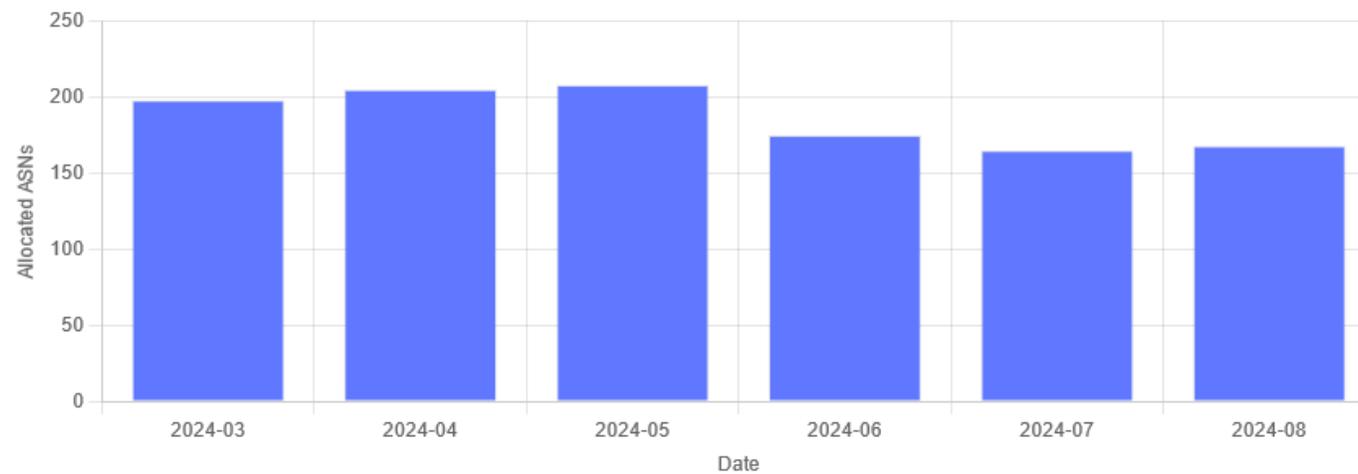
# Trends

- AS-SETs
- Offensive text
- How often does this happen with non-hobby-non-personal networks?
- The DB is open by design, not a security issue
  - Trust based access (registering resources = trusted person)
  - Should this change?

More Trends

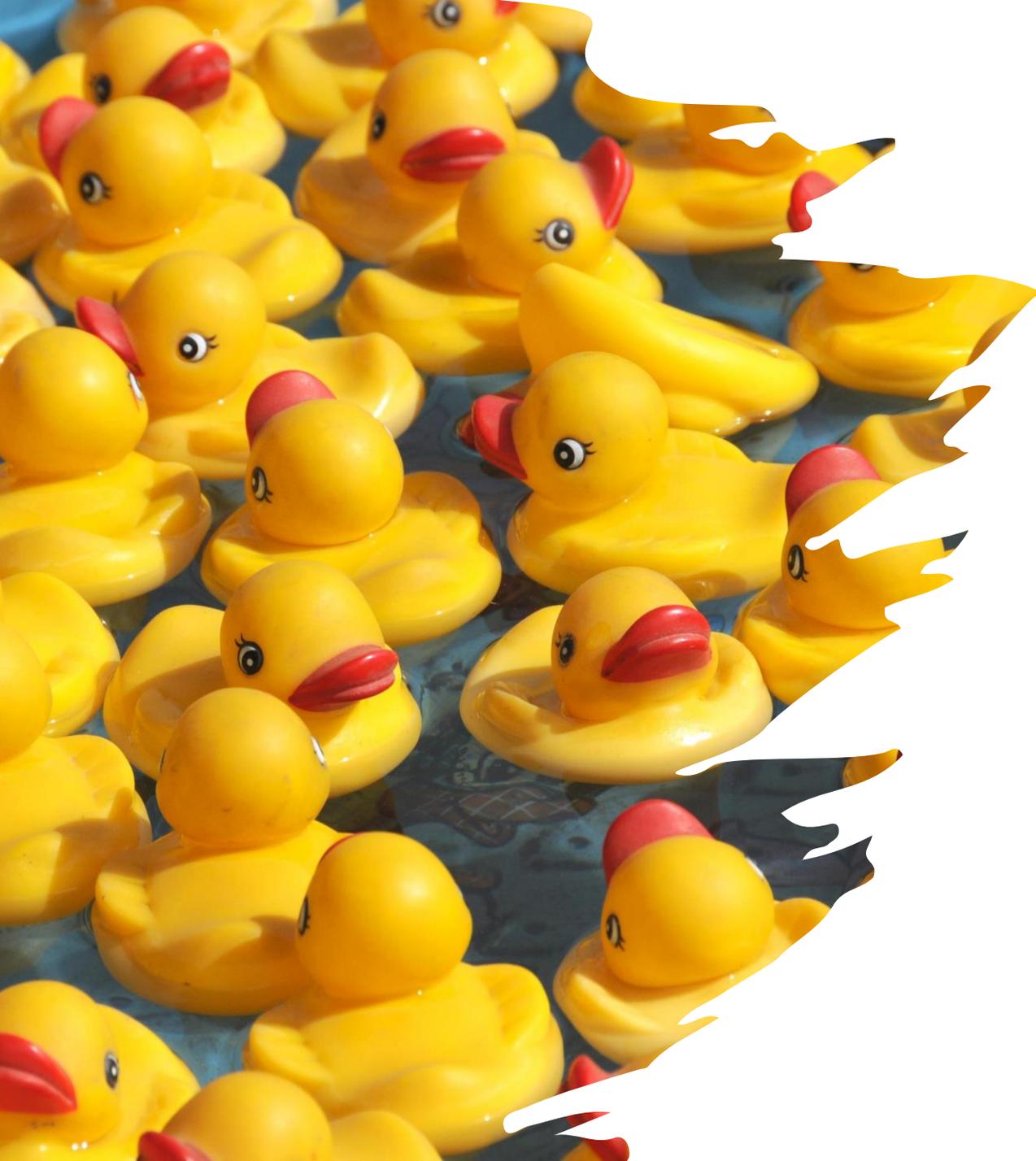
## Allocations for the Last Six Months

Number of ASNs allocated by RIPE NCC to network operators in the last six months.



Charts last updated 2024-09-01  
Based on RIPE NCC data published 2024-08-31

RIPE NCC



# Virtual ASNs

- Personal is not so personal
- Toy ASN would not adequately describe
- Let's keep ASNs as ASNs
  - just some numbers that represent networks
  - in a serious way
  - can do != must do
  - no double standards
- And **manage the abuse** generated by some
  - so that DB changes don't need to be moderated

Thank you!