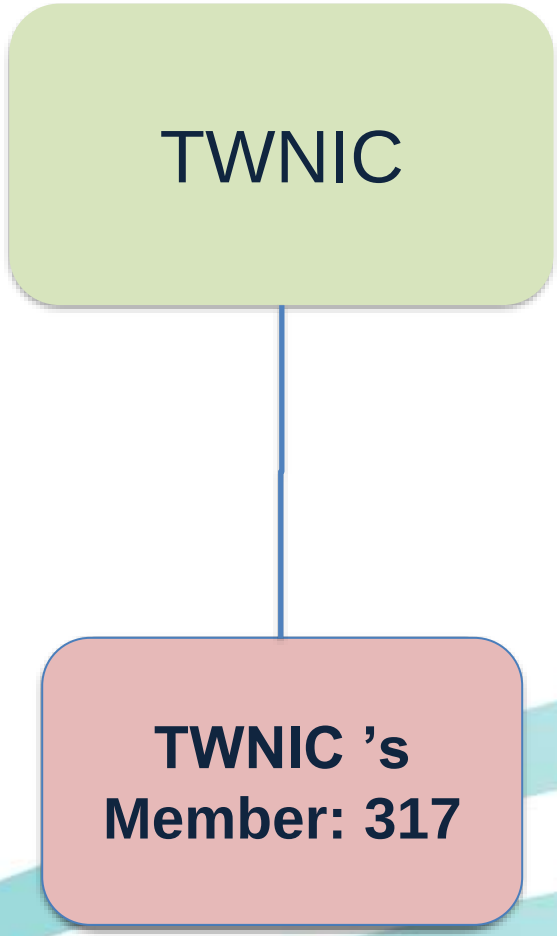
TWNIC IP Services and Policy Update

Outline

- Statistics of TWNIC's IP members
- TWNIC's activities and training programs
- TWNIC RPKI Update
- TWNIC Policy Update
- Conclusions & Future Works

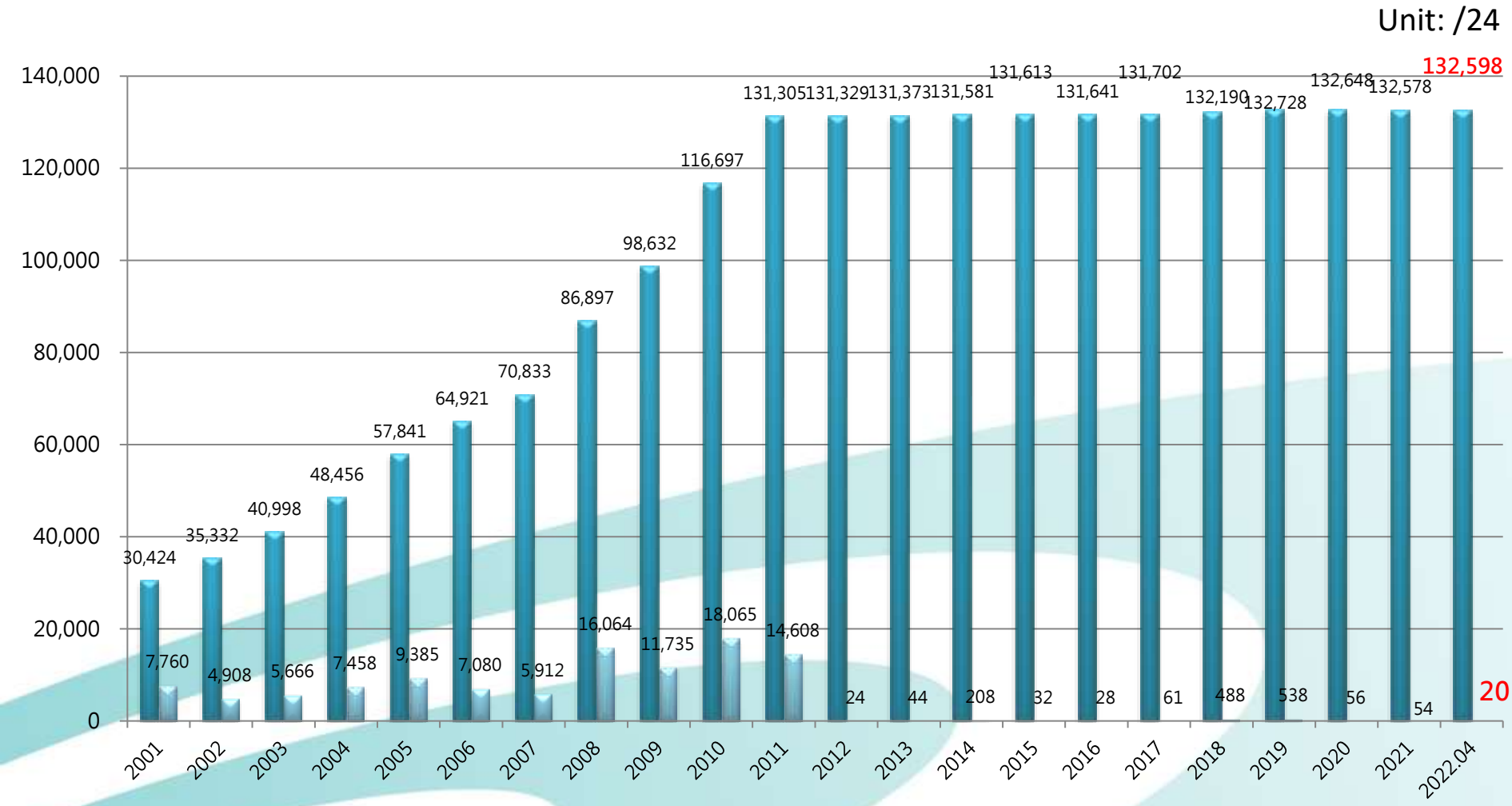
Statistics of TWNIC's IP Members



Service Types	# of TWNIC's Members
Co-location/IDC	64
FTTx	18
ADSL	4
Cable Modem	25
WLAN	2
3G/3.5G	5
4G(LTE)	5

IPv4 Address Allocation

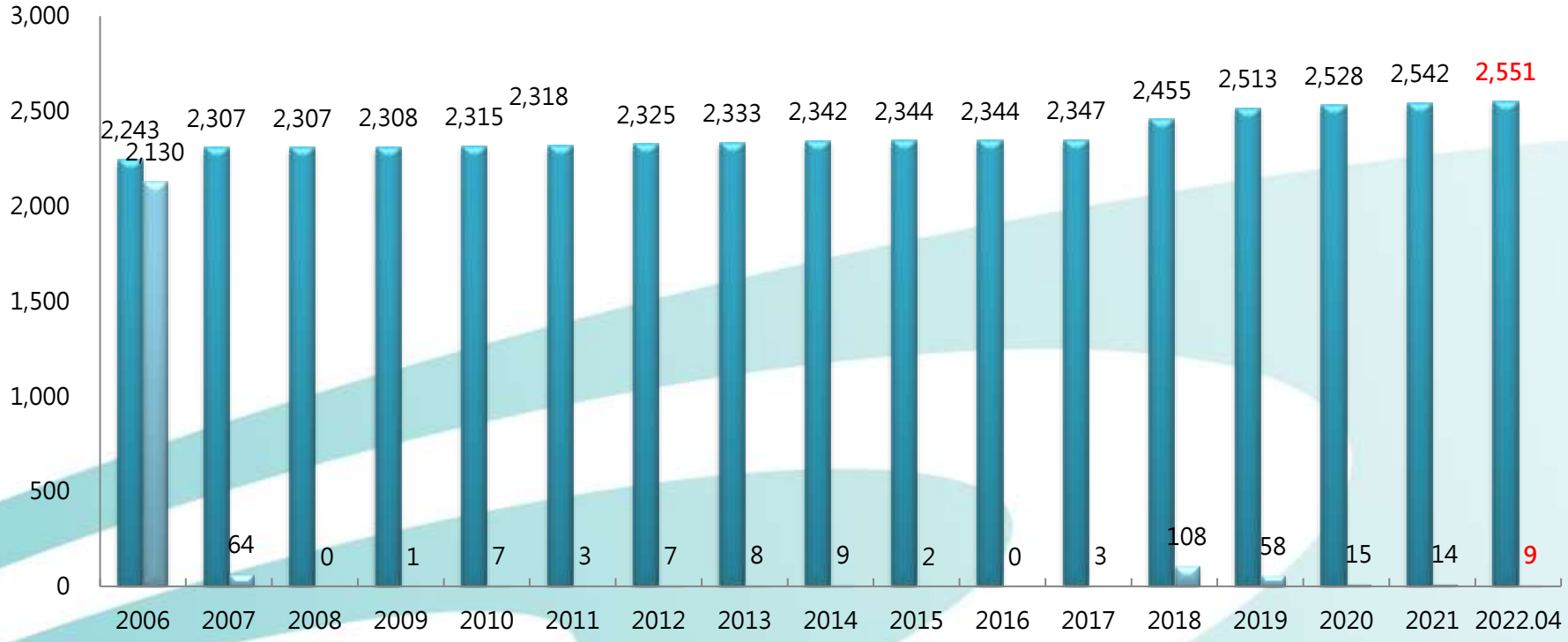
- TWNIC has allocated 132,598 /24s IPv4 addresses.



IPv6 Address Allocation

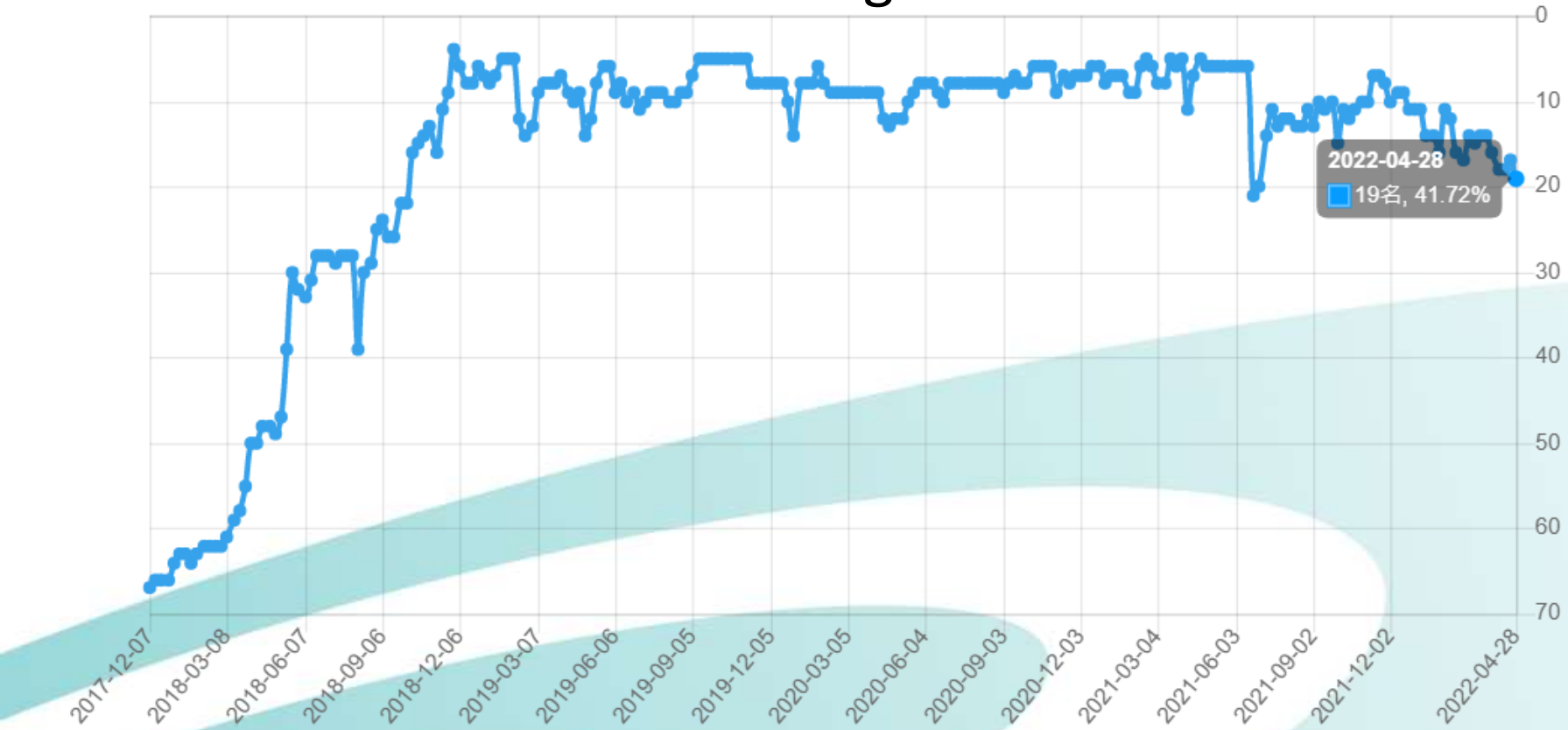
- TWNIC has allocated 2,551 /32s IPv6 addresses.
- Most of TWNIC IP members have obtained IPv6 addresses.

Unit: /32



Taiwan IPv6 User Availability

- Taiwan IPv6 user availability is 0.46% in the end of 2017 and 41.72% in April 2022.
- Taiwan IPv6 Global Ranking: 19



https://ipv6now.twnic.tw/ipv6/index.html

36th TWNIC IP Open Policy Meeting

- Time: Oct 6, 2021 Online
- Keynote speech:
  - **BGP Security Threats and Challenges**
    Geoff Huston, Chief Scientist, APNIC
  - **Challenges of 5G for Smart Applications**
    Alex Chien, President of Mobile Business Group, Chunghwa Telecom
- Session topics include Cyber Security SIG, Cooperation SIG, Policy SIG and IPv6 Deployment SIG etc.
- To see the detail agenda, visit https://opm.twnic.tw/36th/agenda.html

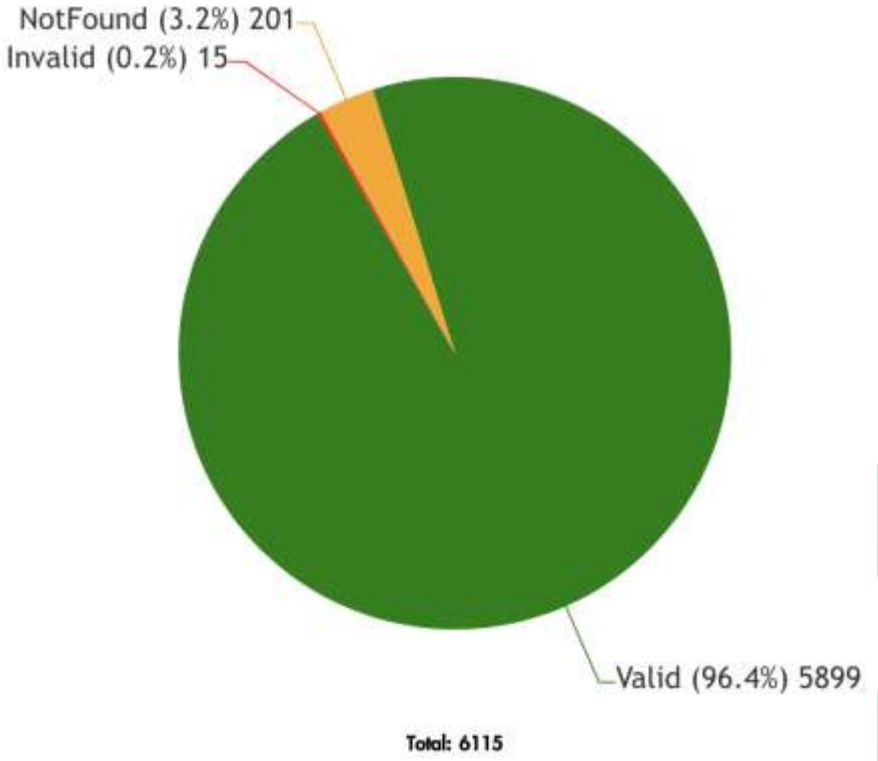
IP Network Communication Training

- We hold 13 IP network communication trainings in 2021.

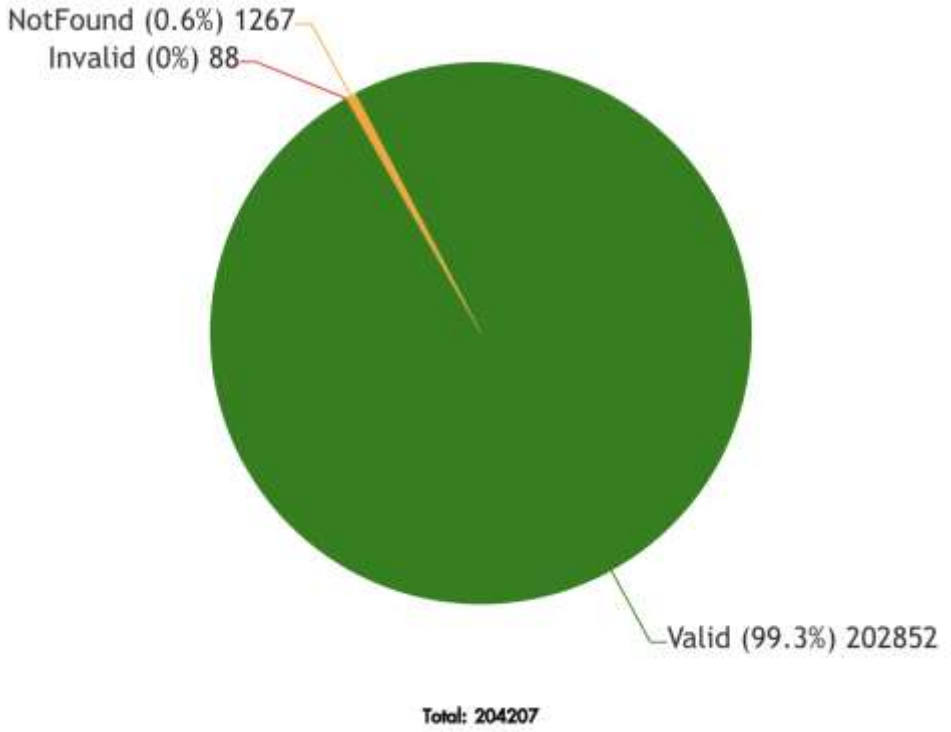
SN	Location	Date	On-site Attendees	Remote Attendees	Total Attendees
1	Kaohsiung	4/29	41	X	41
2	Yunlin	5/28	X	28	28
3	Taipei	6/09	X	45	45
4	Taipei	7/09	X	41	41
5	Taipei	8/25	X	36	36
6	Taipei	9/08	X	48	48
7	Yunlin	9/24	X	27	27
8	Taipei	10/22	X	44	44
9	Kaohsiung	11/05	41	17	58
10	Yunlin	11/17	18	30	48
11	Kaohsiung	11/26	36	18	54
12	Kaohsiung	12/24	39	20	59
13	Yunlin	12/29	24	24	48
Total			199	378	577

TWNIC RPKI Service

Number of Routing: IPv4 Valid Prefix 96.4%



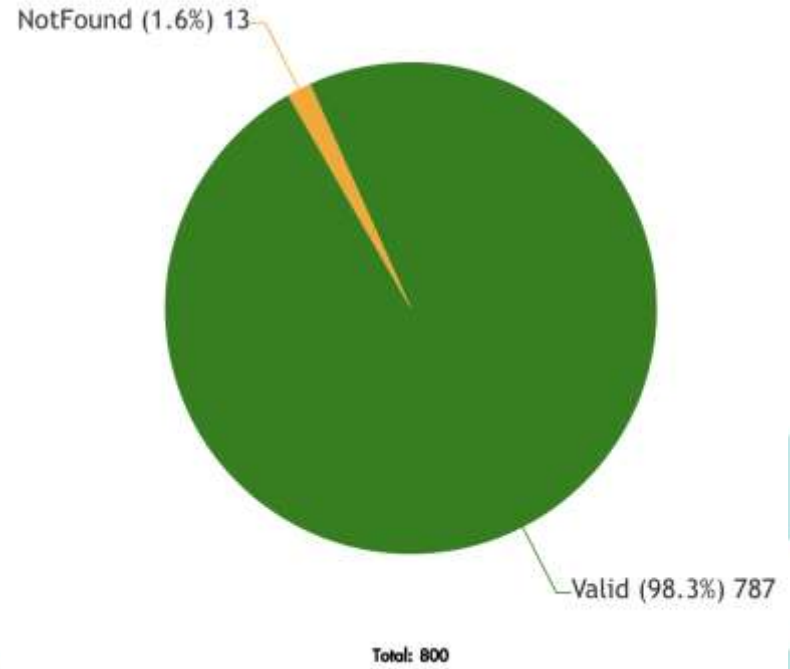
Number of Class C: IPv4 Valid Space 99.3%



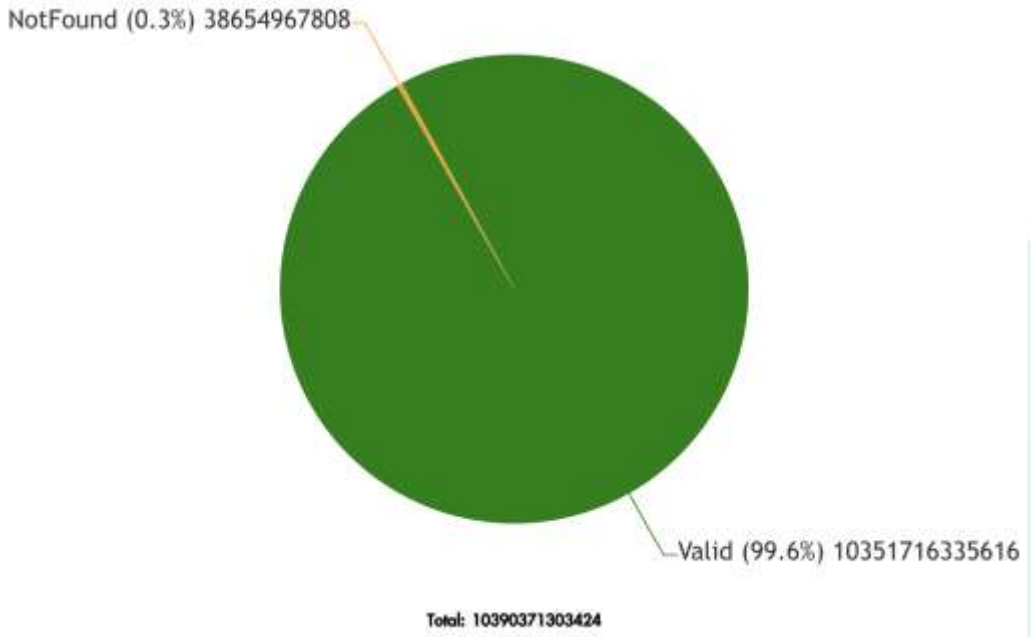
date：2022/4/29

TWNIC RPKI Service

Number of Routing: IPv6 Valid Prefix 98.3%



Number of /64: IPv6 Valid Space 99.6%



date：2022/4/29

TWNIC Policy Update

1. Deleting SOR process

- **Policy basis**
  - **prop-139-v001: SOR not required**
    - Objective : This proposal suggests deleting the LIR Second Opinion Request (SOR) process from the policy, which is rarely used, and is no longer required with the exhaustion of IPv4, and not required with IPv6.
  - **Proposal history in APNIC**
    - **16 September 2021** Reached consensus at APNIC 52.
    - **6 December 2021** End of editorial comment period. Policy published as apnic-127-v010.

1. Deleting SOR process

- **Proposal history in TWNIC**
  - **18 February 2022** Endorsed by TWNIC IP Committee
  - **28 March 2022** Policy published and Announcement.
    - Delete the relevant provisions of the SOR (Second Option Request) process.
    - Amendments to the TWNIC Internet Address Application and Issuance Principles.
    - Delete xDSL and Cable IP address allocation principles.

2. Transfer Policy Amendments

- **Policy basis**
  - APNIC Internet Number Resource Policies
    - 8.1. Transfers of IPv4 addresses between APNIC account holders
    - 8.2. Inter-RIR IPv4 address transfers
- **Proposal in TWNIC**
  - Proposal for Amendments to TWNIC Internet Address Reclaim and Transfer Principles
    - In order to promote the effective use of IP address resources, TWNIC refers to the APNIC IP address resource transfer policy and revises the "TWNIC Internet Address Reclaim and Transfer Principles".

2. Transfer Policy Amendments

- **Proposal history in TWNIC**
  - **18 February 2022** Endorsed by TWNIC IP Committee
  - **28 March 2022** Policy published and Announcement.
    - Amendments to the TWNIC Internet Address Reclaim and Transfer Principles.
    - The transfer of address resources between TWNIC IP members, and between TWNIC IP members and RIR members is allowed.

Conclusions & Future Works

- TWNIC have 13 new members in 2022.
- We encourage and help Taiwan ISPs and service providers to manage ROAs to increase the ROA coverage gradually.
- We will continually hold the IPv6 training and activities this year.

Thank You