



Asosiasi
Penyelenggara
Jasa
Internet
Indonesia

INDONESIA INTERNET SERVICE PROVIDER ASSOCIATION



IDNIC

indonesia
network
information
centre

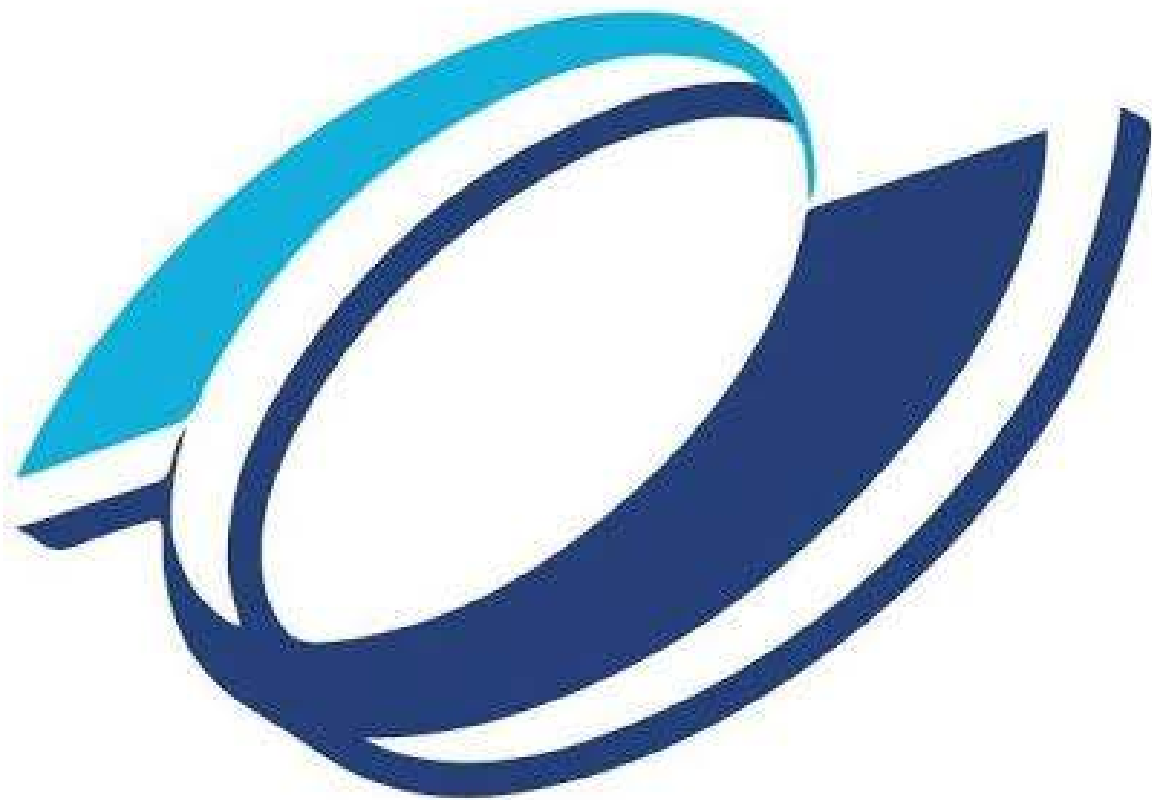
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IDNIC-APJII Update

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Indonesia Network Information Centre
Indonesia Internet Service Provider Association
APNIC59 NIR SIG - 26th Feb 2025

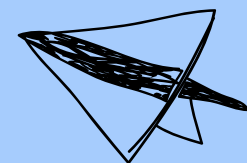
IDNIC-APJII ACTIVITIES



Serving IP Address users
Manage and distribute Internet
resource (IP & ASN)



Collaboration with
APNIC & other NIRs



Training and Workshop



Contents

- Internet Penetration Development in Indonesia
- Statistics of IDNIC-APJII
- RPKI ROA Adoptions
- APJII Honeyypot Project
- IDNIC-APJII Training Series Program
- Future Plans



INTERNET PENETRATION DEVELOPMENT IN INDONESIA



Internet Development in Indonesia

Internet Penetration Rate in Indonesia

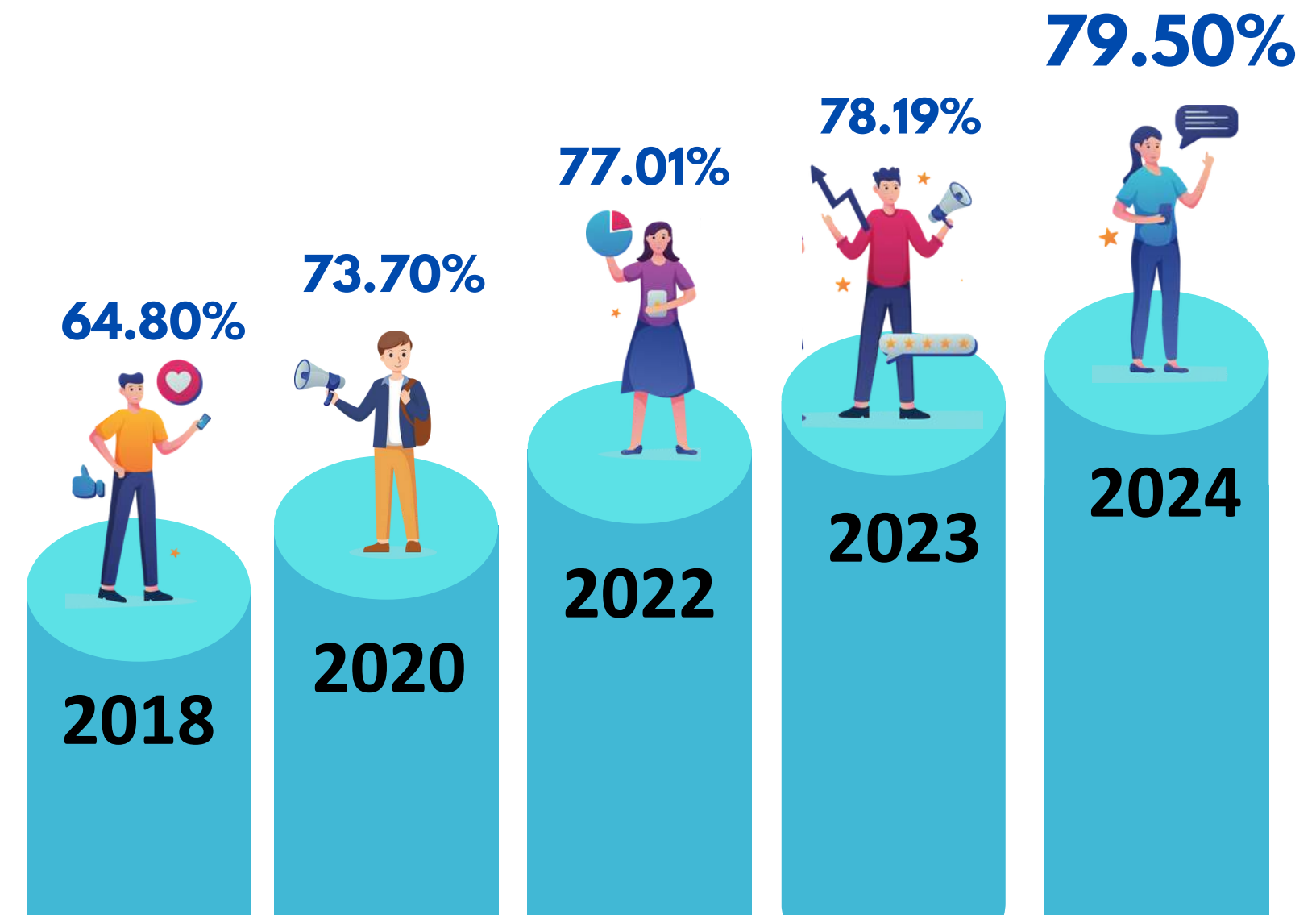
79.50%

Number of Internet Users in 2024:

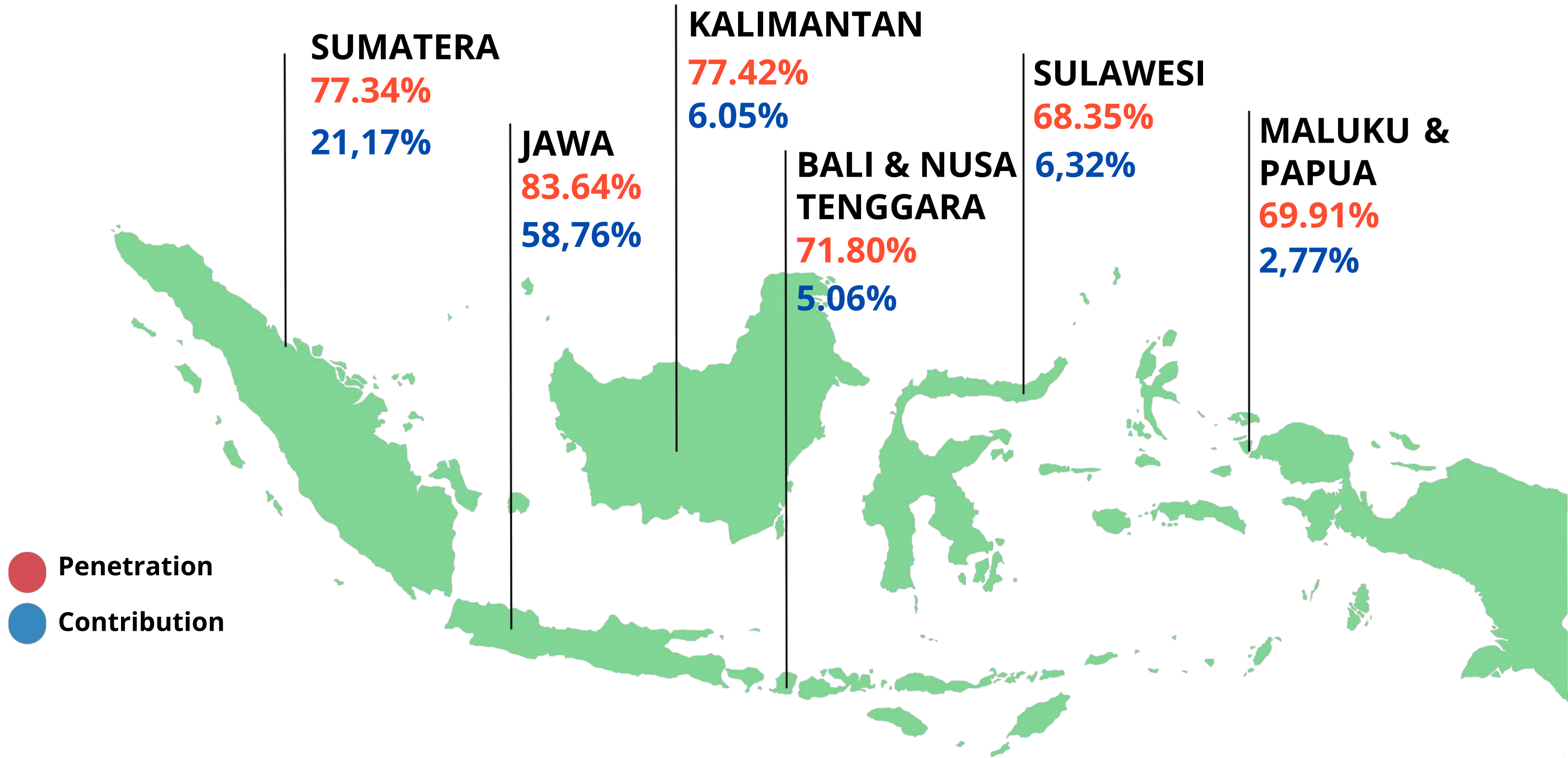
221,563,479 people out of a total population of 278,696,200 in 2023.

Internet Penetration Growth Rate in Indonesia:

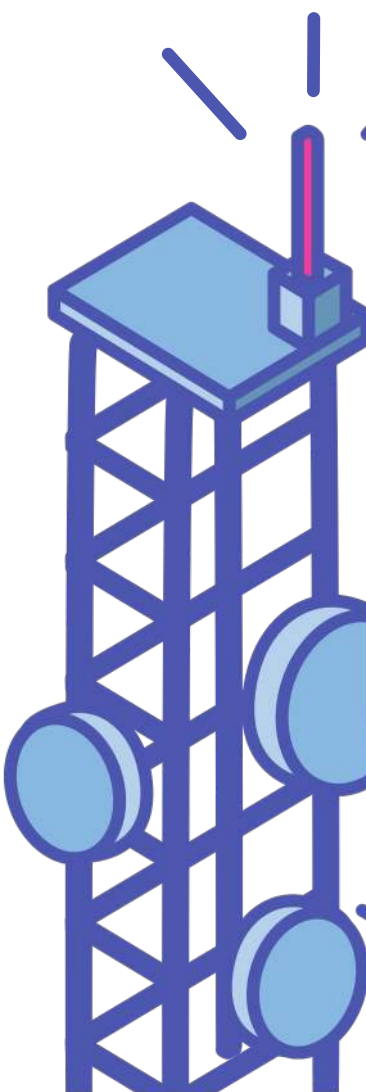
89%



Internet Penetration Rate in Indonesia



● Penetration
● Contribution

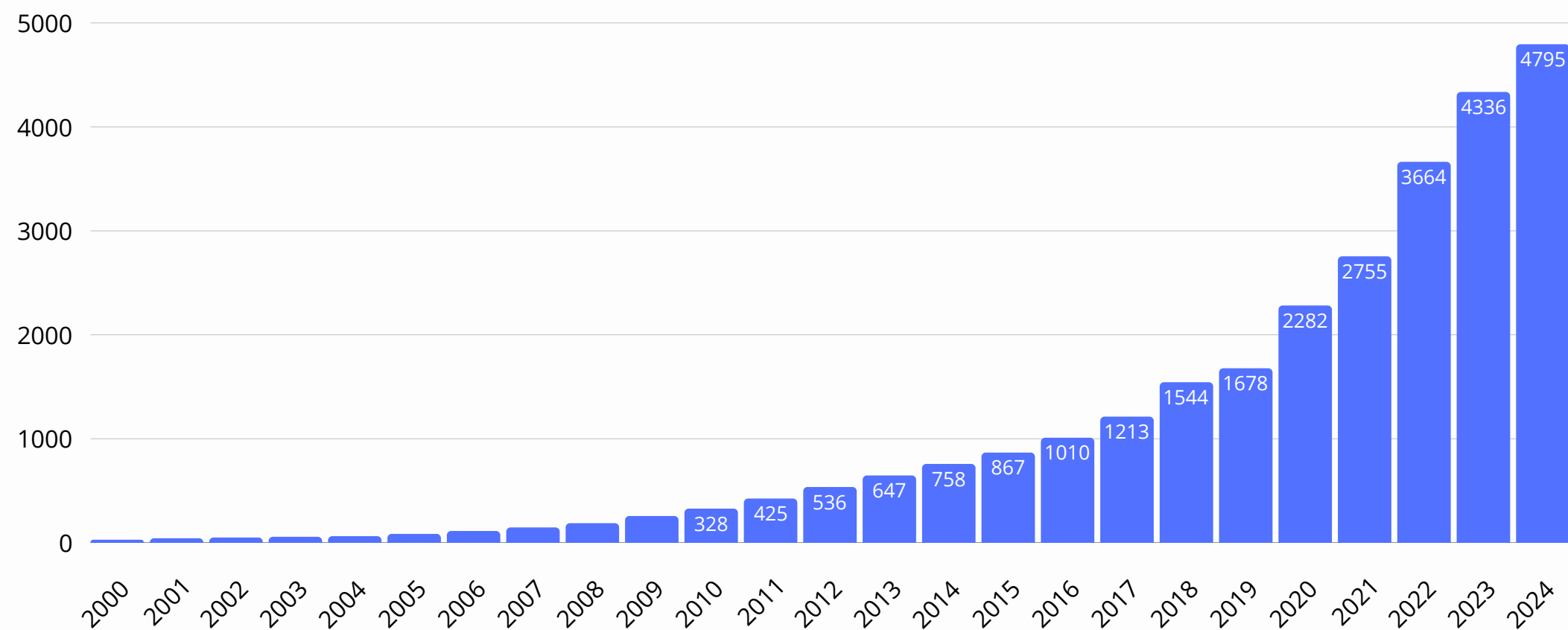




STATISTICS OF IDNIC-APJII

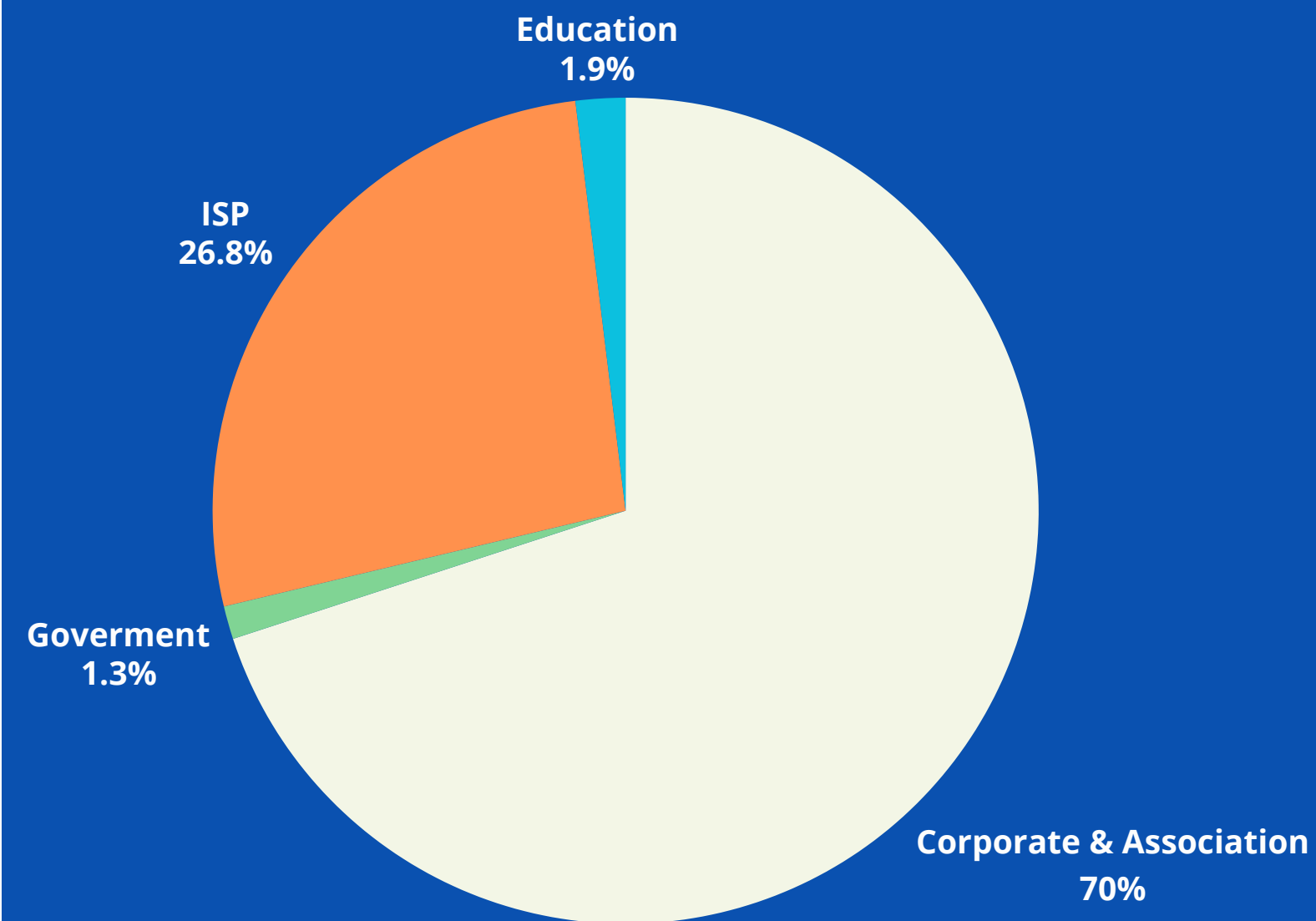


Statistics of IDNIC-APJII's IP Address users



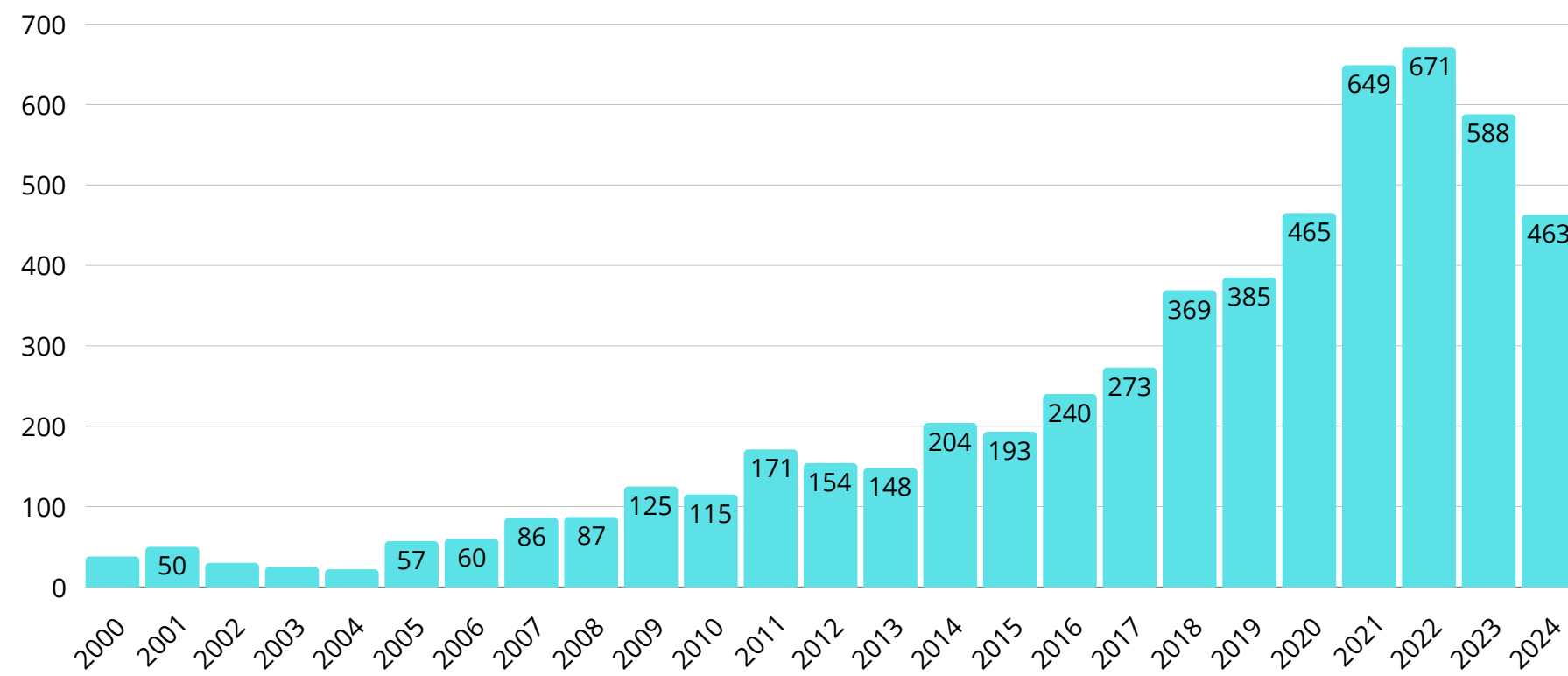
The users come from various sectors. The majority 70% are corporate and association members. ISPs account for 26.8%, while educational institutions and government agencies make up the remaining portion.

IDNIC-APJII's IP Address users



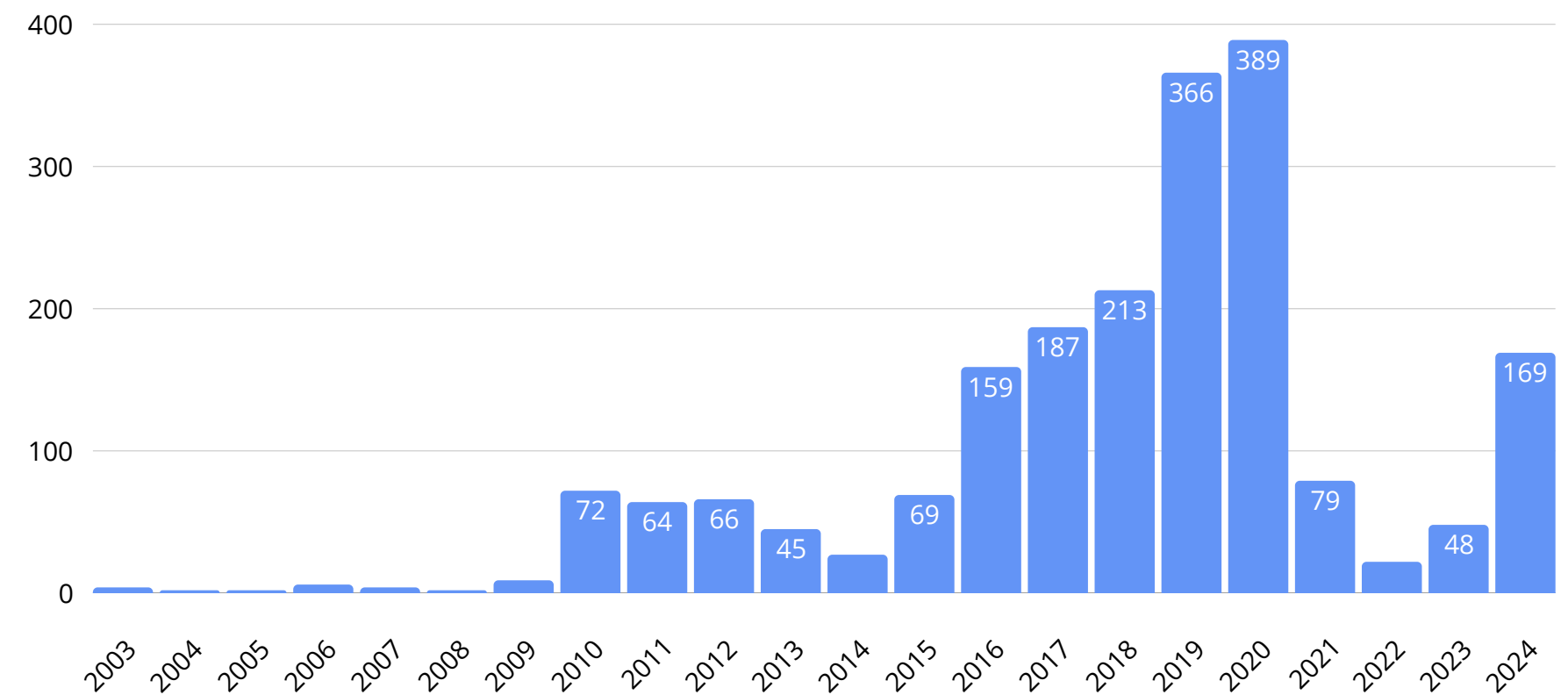
IPv4 Address Allocation

IDNIC has allocated 79,078 / IPv4 addresses

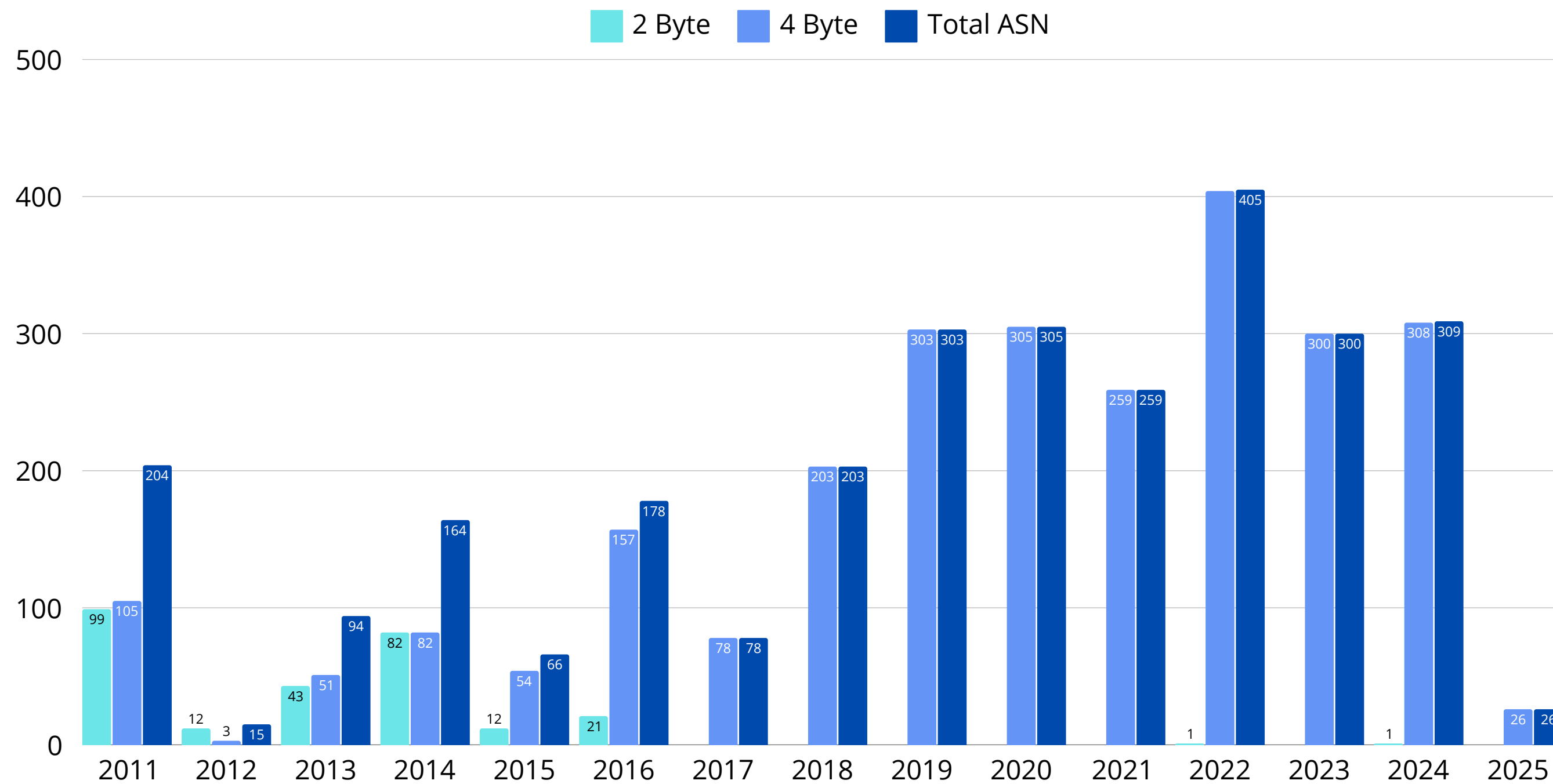


IPv6 Address Allocation

IDNIC has allocated 543,963,60 / IPv6 addresses



ASN Allocation

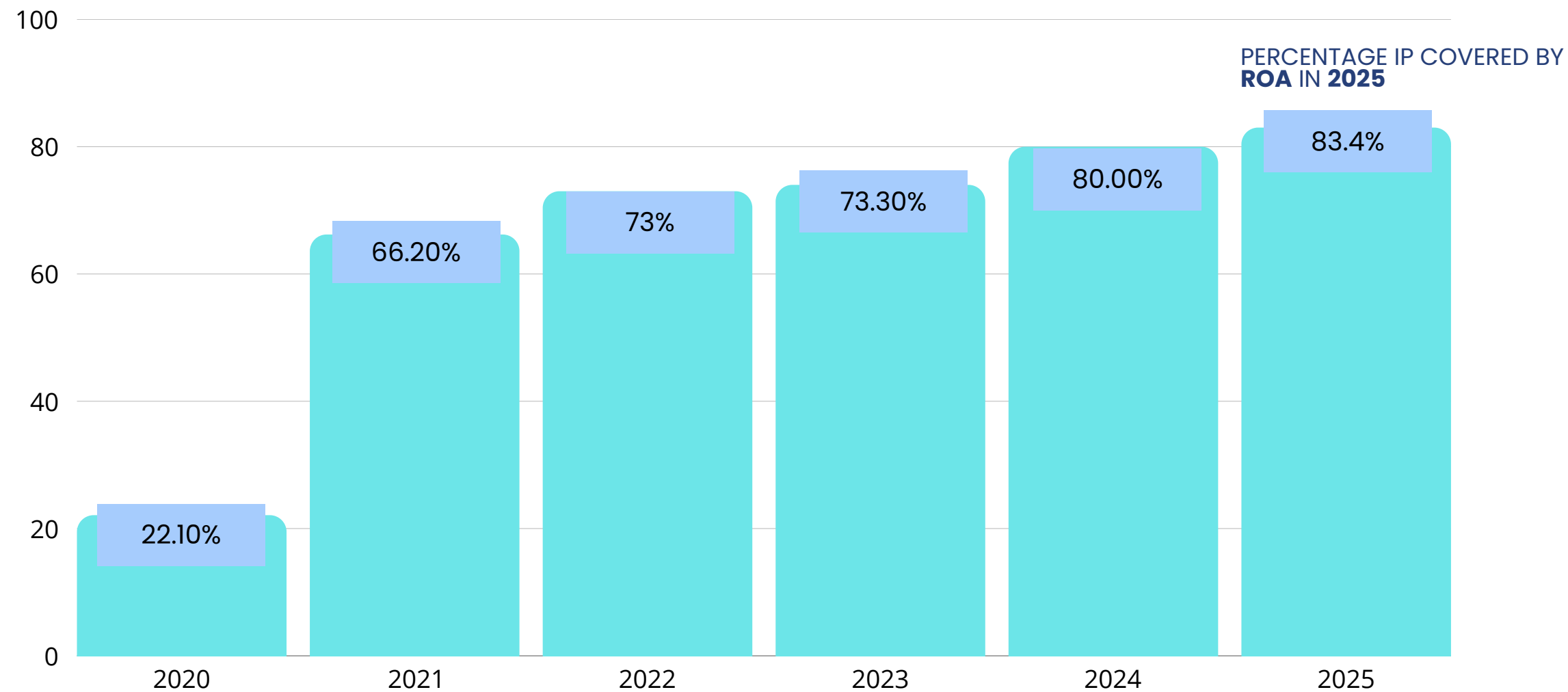




RPKI ROA ADOPTIONS



Percentage IPv4 Covered by ROA in Indonesia



IDNIC-APJII RPKI REPOSITORY SERVER

545 MBPS

Traffic Peak RPKI

70RPS

Median Rsync

228RPS

Median RRD

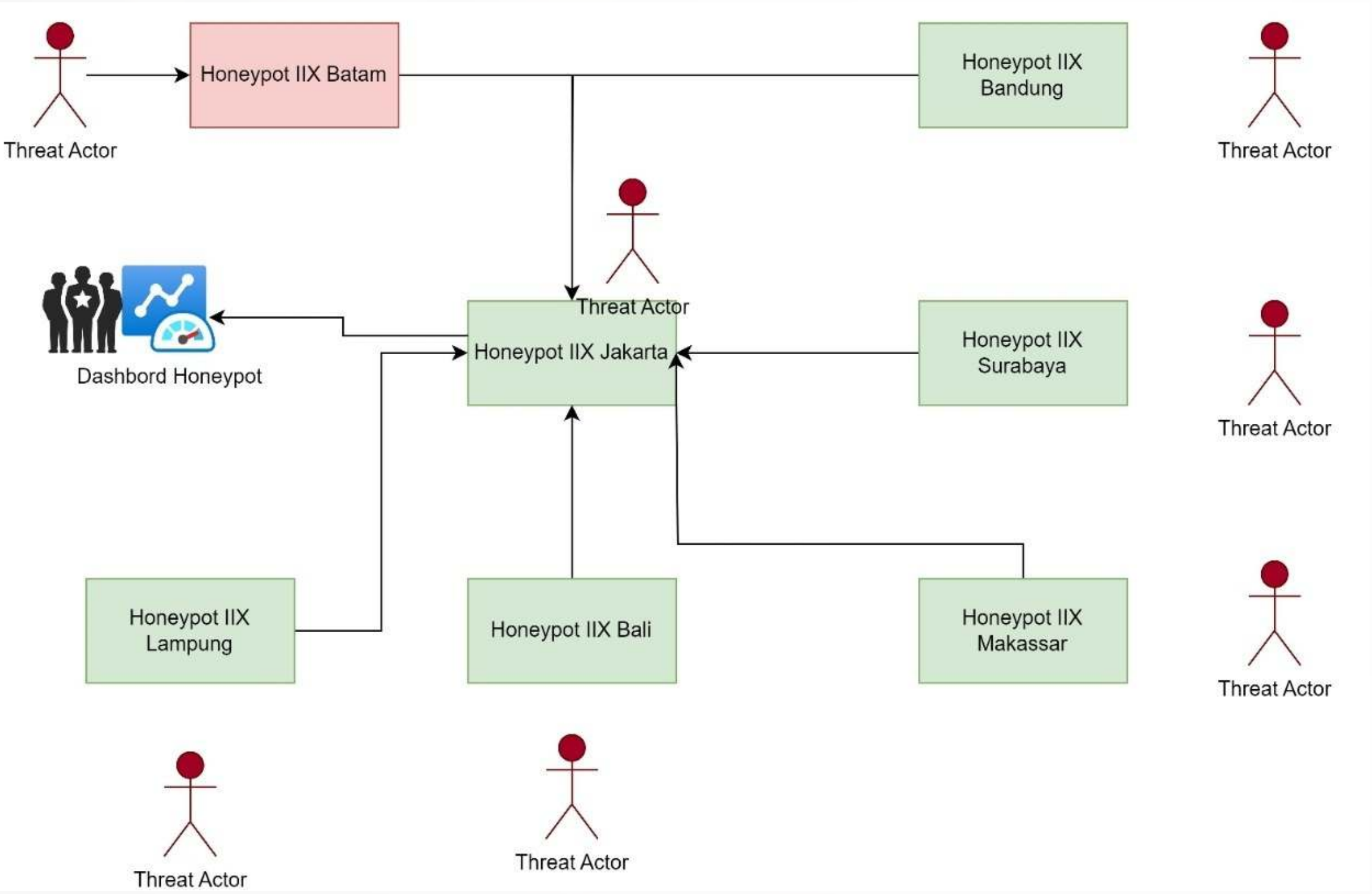




APJII HONEYPOT PROJECT

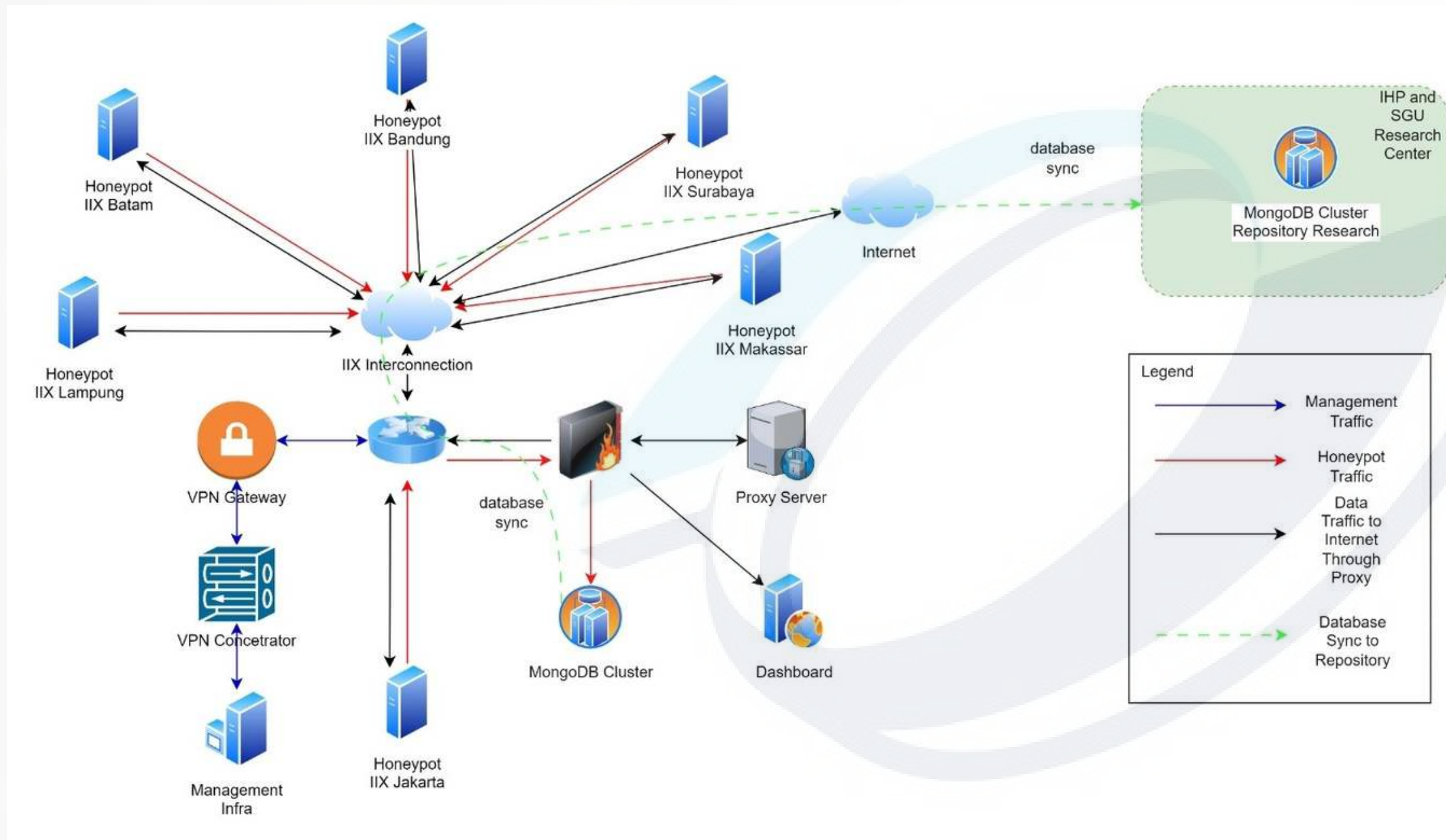


ACHIEVEMENTS – HONEYPOT SENSORS



- Honeypot sensors have been installed at seven IIX (Indonesia Internet Exchange) locations.
- Connectivity now supports both IPv6 and IPv4.
- The Honeypot dashboard is accessible and can be monitored effectively.

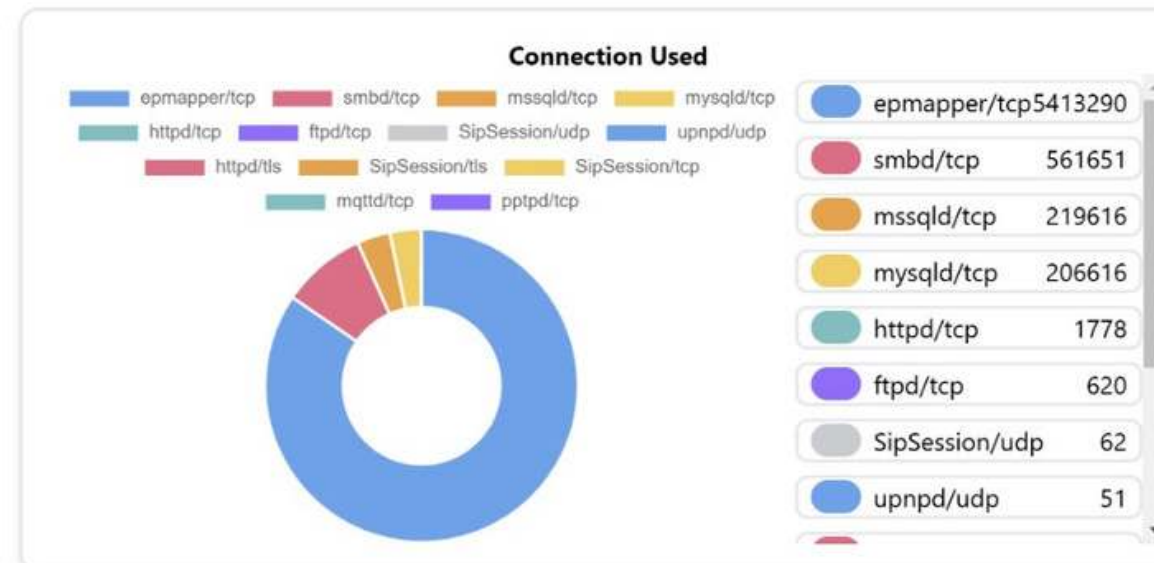
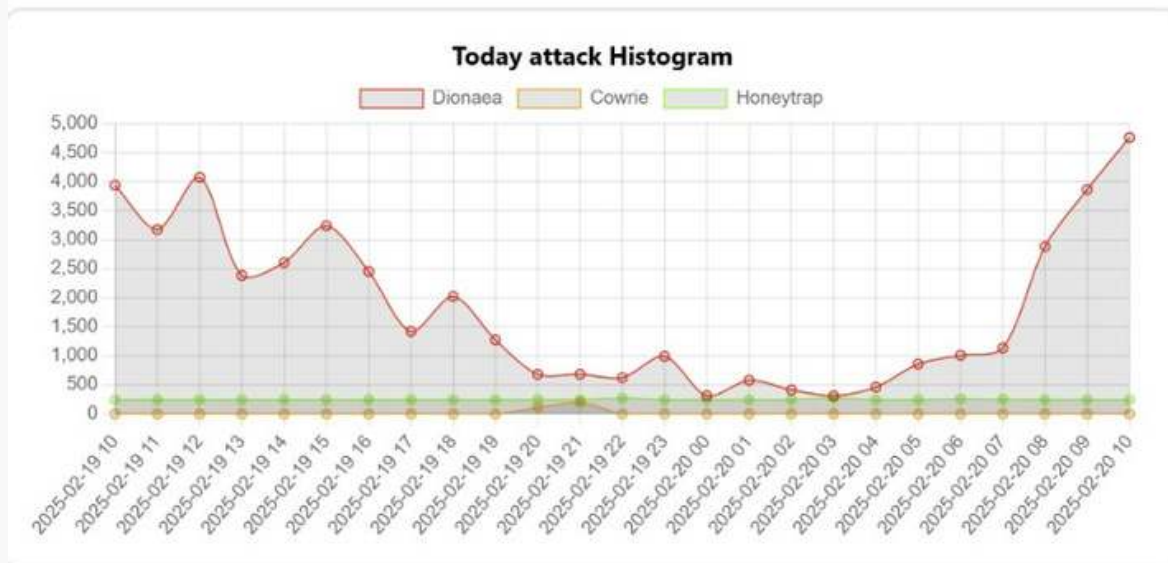
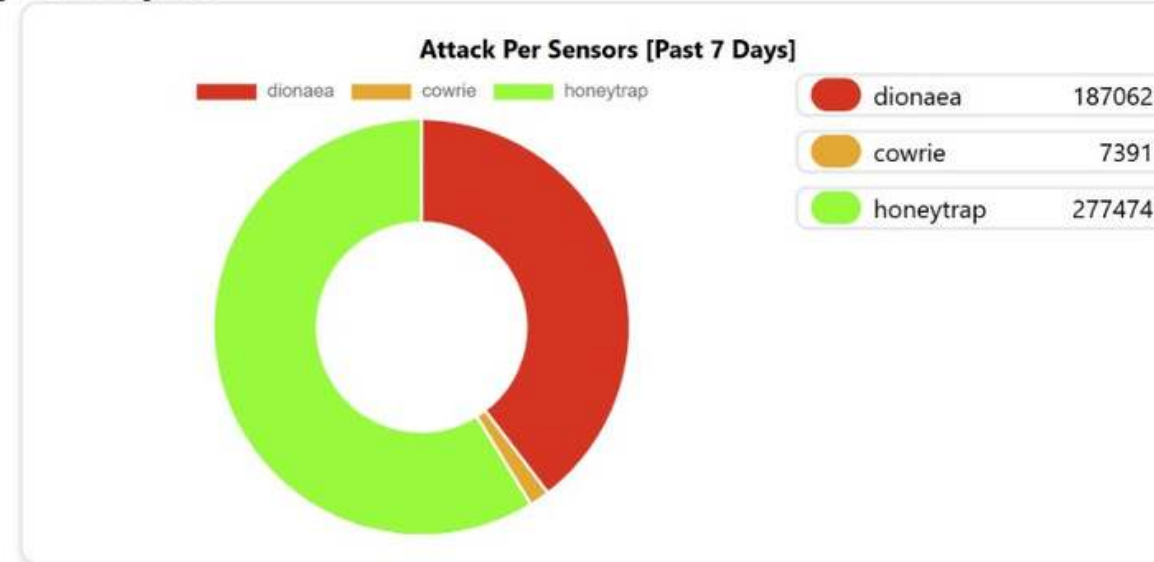
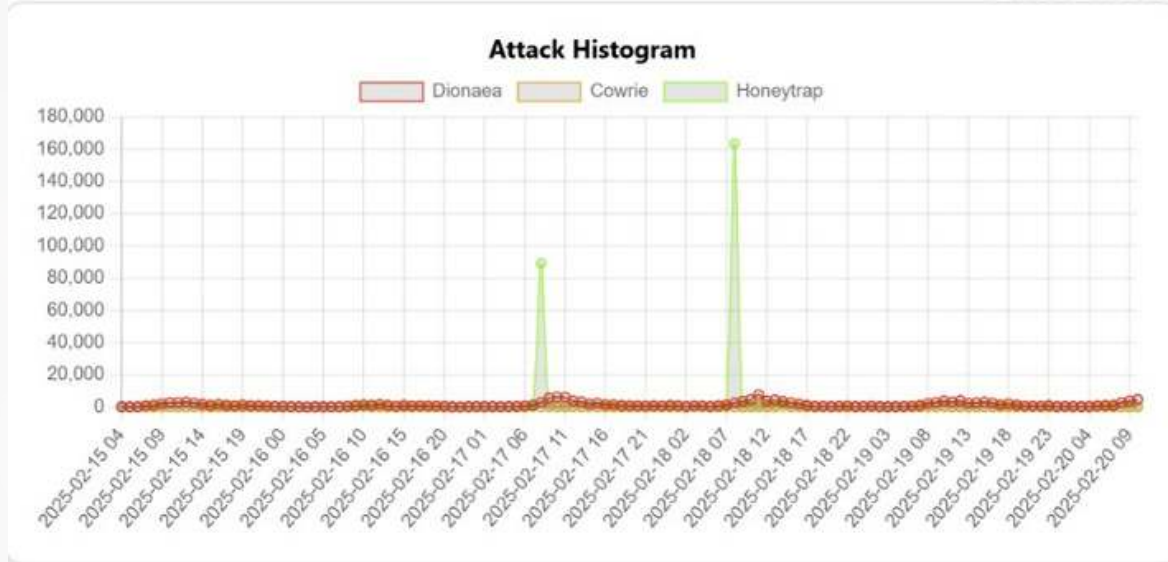
ACHIEVEMENTS – LOW-LEVEL DESIGN



- The project is supported by ISIF Asia.
- Collaboration with researchers from the academic sector, specifically from Swiss German University (SGU).

ACHIEVEMENTS – PUBLIC HONEYPOT DASHBOARD

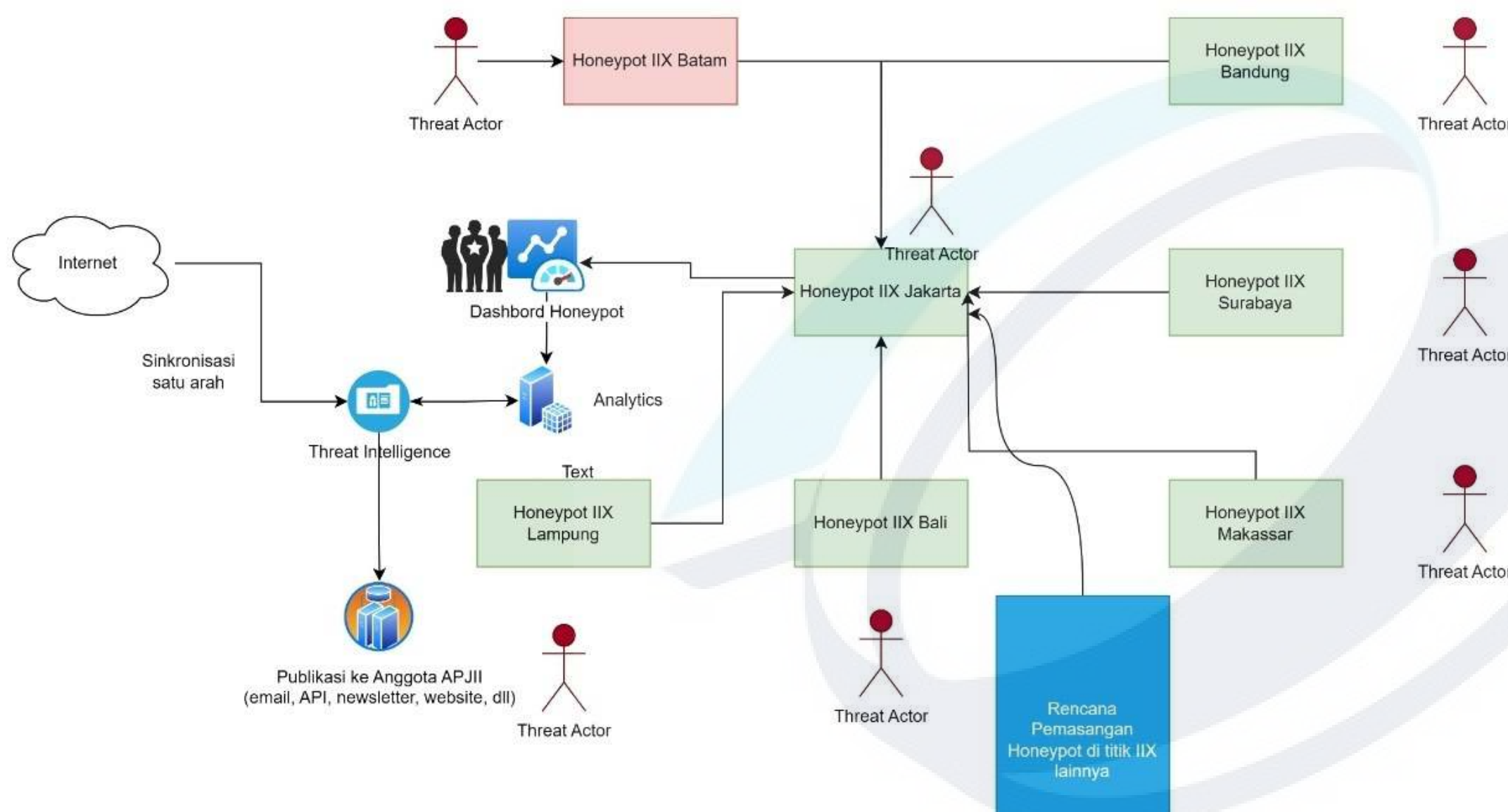
APJII Honeynet Project



IP	Source of Attack COUNTRY	AMOUNT OF ATTACK
110.232.87.79	Indonesia - Jakarta	28987
101.255.90.244	Indonesia - Jakarta	25723
36.89.86.139	Indonesia - Menara	25384
36.92.56.49	Indonesia - Menara	22025
36.94.214.2	Indonesia - Menara	19938
36.94.13.103	Indonesia - Menara	17785
114.9.25.6	Indonesia - Medan	16915
36.88.55.198	Indonesia - Menara	15912
103.131.104.47	Indonesia - Yogyakarta	14849

- Detects attack sources and provides statistical analysis.
- Identifies attack patterns based on time, targeted services, and attack types.

FUTURE PLANS



- Expanding honeypot sensor deployment to additional IIX locations.
- Implementing analytics tools to process and analyze honeypot logs.
- Developing a threat intelligence system based on honeypot analytics, enriched with external threat intelligence data (one-way integration, ensuring internal data is not shared externally).
- Publishing analysis results for APJII members.



IDNIC-APJII TRAINING SERIES PROGRAM



IDNIC-APJII Training Series

DATE	TOPIC	PARTICIPANTS
29 April 2024	IPv6 Advanced	42
29 April 2024	Information Security Advanced	37
30 April 2024	BGP Advanced	42
30 April 2024	DNS Advanced	42

DATE	TOPIC	PARTICIPANTS
10 July 2024	IPv6	39
10 July 2024	IRM (Management Resources & IDNIC Products)	52
10 July 2024	Artificial Intelligence	48
10 July 2024	Open IXP	51
11 July 2024	IRM (Management Resources & IDNIC Products)	38
11 July 2024	BGP	46

In 2024, we conducted multiple training sessions covering IPv6, BGP, DNS, Information Security, and other critical topics. These sessions equip our members with the latest knowledge in internet resource management.





FUTURE PLANS



WHAT'S NEXT

- **IDNIC-APJII's Initiative to Improve IP Address Availability and Ensure Internet Service Continuity.**
- **IDNIC-APJII continues to promote the use of IPv6 and educate members on how to migrate efficiently.**
- **IDNIC-APJII efficiently manages and distributes IP address allocations, with supervision from APNIC. Transparency and procedures are enforced to optimize IP address availability.**
- **IDNIC-APJII continues to coordinate with the government and related regulators regarding the development of policies and regulations that support IP address availability and increased internet access in Indonesia.**
- **IDNIC-APJII holds education and training programs for its members to increase capacity and knowledge about IP address management, migration to IPv6, network security, and other relevant issues.**
- **IDNIC-APJII promotes better network security practices among members to reduce the risk of cyberattacks.**

Thank you!



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