IDNIC
NIR Operations Update

Prepared by IDNIC

2021

IDNIC Activities

Manage & Distribute IP from APNIC

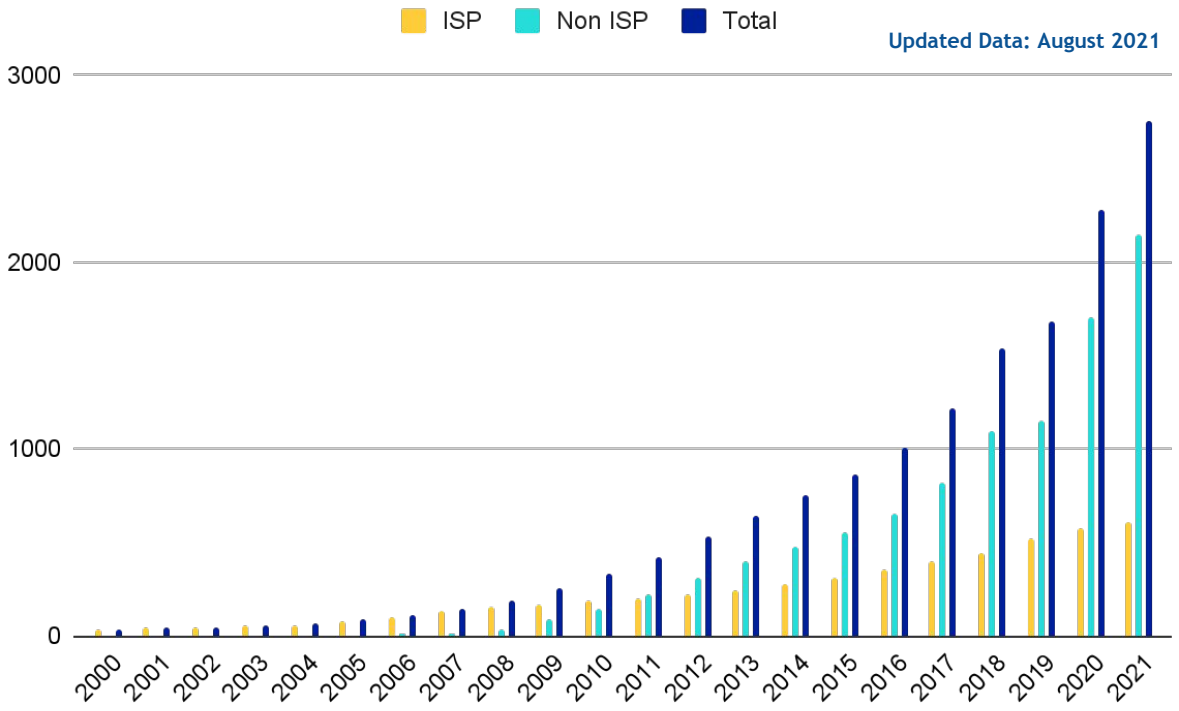
Training and Workshop

Supporting National Internet Development

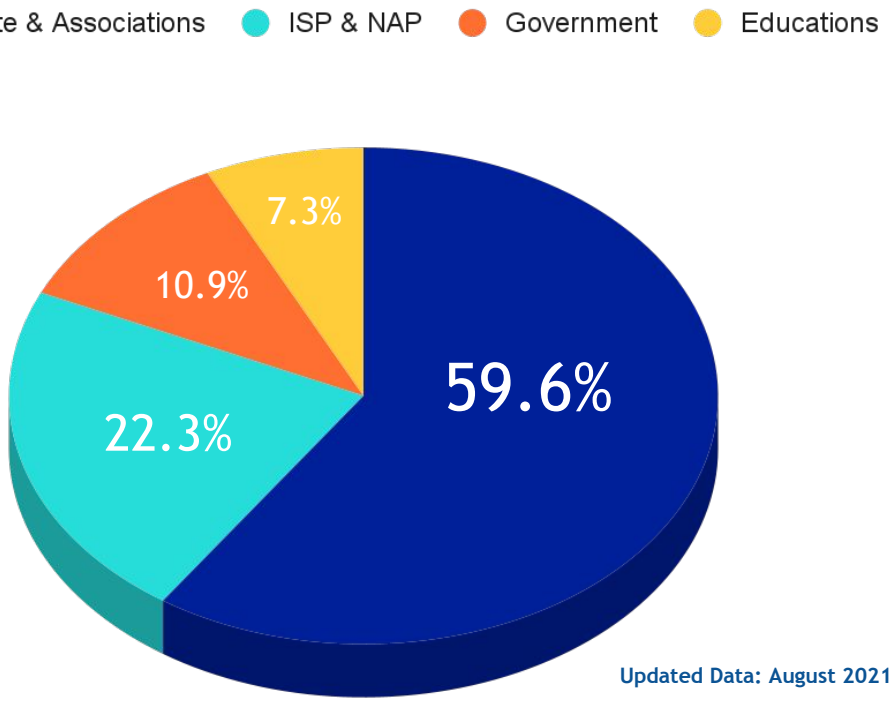
Serving IDNIC Members

Cooperating with APNIC & NIRs

IP & ASN Delegation

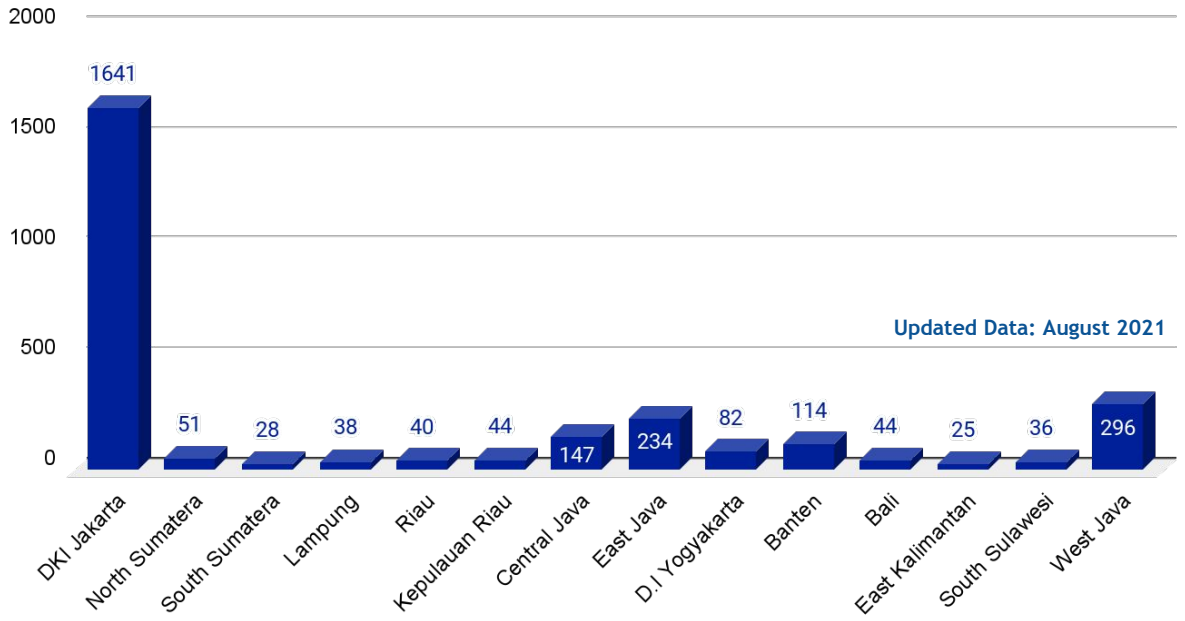


IDNIC
Member Statistics

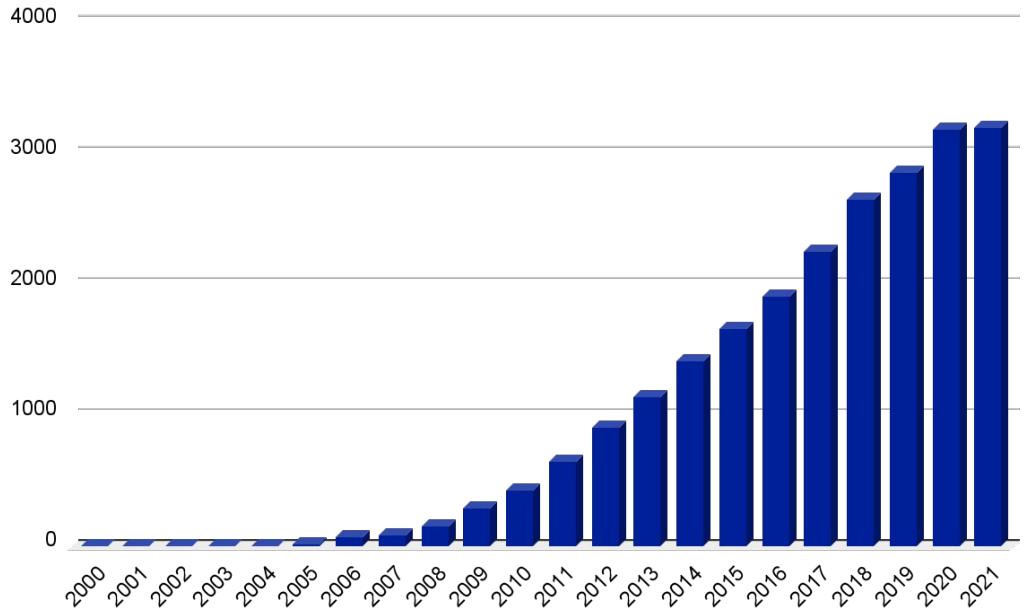


Updated Data: August 2021

IDNIC
Member Compositions

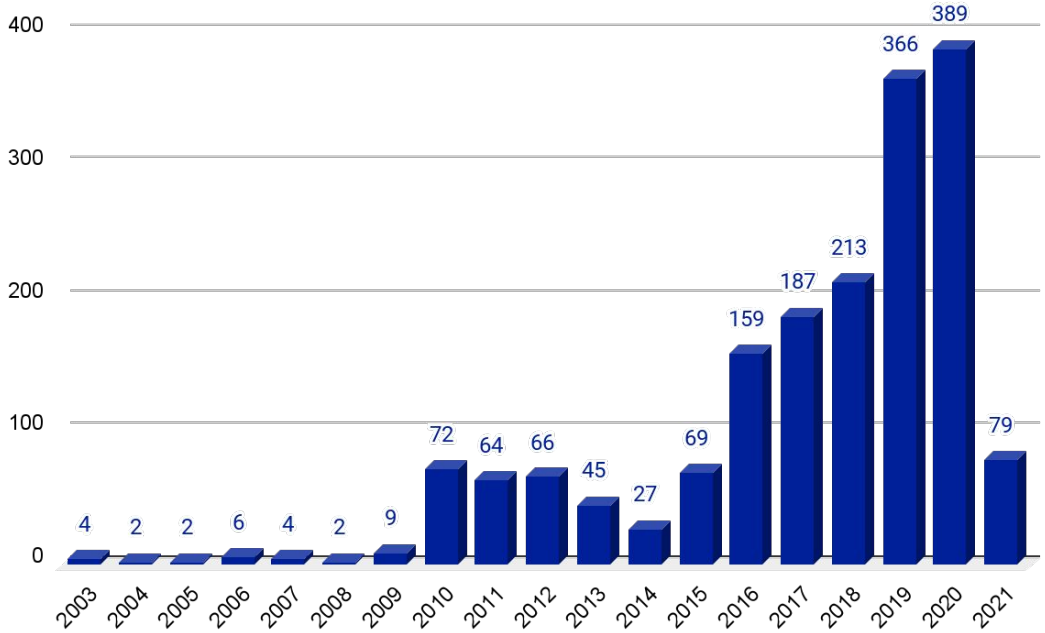


IDNIC
Member Distributions



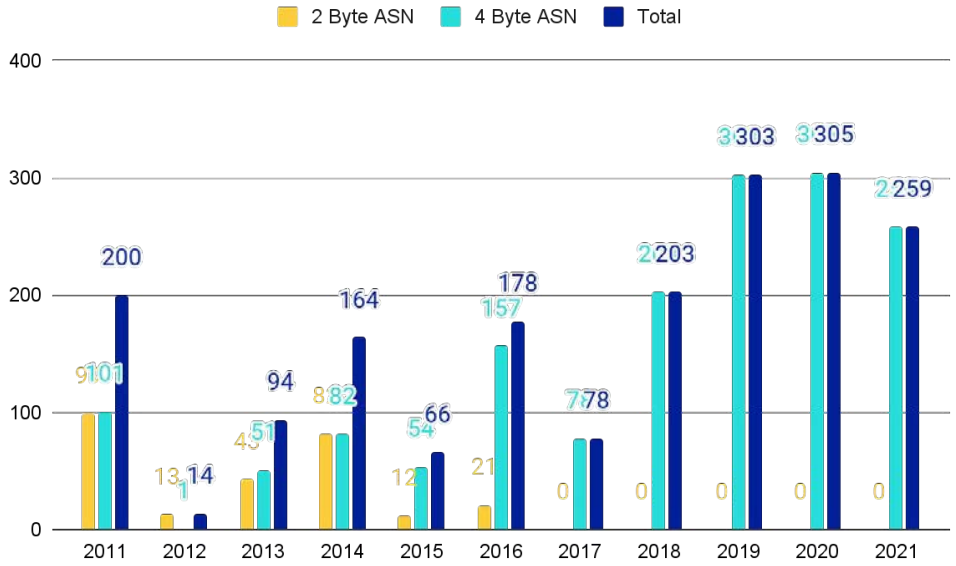
IPv4 Delegated

>18 Million Address



IPv6 Delegated

>43 Million /48 IPv6 Address



ASN Delegation

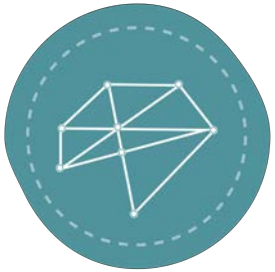
>2100 ASN Delegation

IDNIC
Member Services

MyIDNIC

Whois

RPKI



IRR

CERT

Online Portal for IDNIC Members

MyIDNIC

A member portal that is useful for managing Internet resources, updating contact information, and receiving IDNIC services online.

Whois Update & Tools

ROA & RPKI Request

Reverse DNS

Trouble Tickets

IRR Management

Supporting National Internet Development

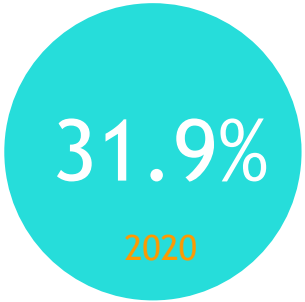
IDNIC
RPKI PROGRESS

1

State of RPKI in Indonesia

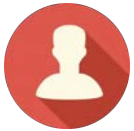
BGP Advertisement Covered by RPKI

https://observatory.manrs.org/



HOW WE APPROACH THAT NUMBER?

Webinar



Direct Contact
- Personal touch on telegram group
- Email blast targeted

Publication

IDNIC RPKI Plan

Q4 2020

Support contract with NLNet Labs

Q3 2021

Upgrade to krill v0.9.0

Add krill-sync nodes

Q4 2021

Enable RPKI validation on national internet exchange

IDNIC IRR Routing Completeness

94.3%
Registered

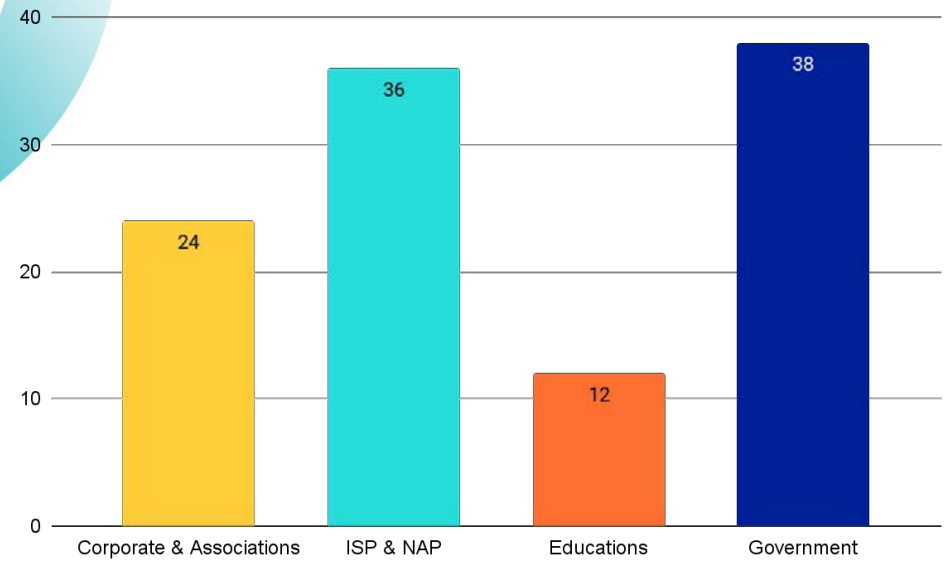
IDNIC Geoloc & Meta Feeds

Ipinfo.io, maxmind

Google (on progress)

IDNIC
IPv6 Deployment

2



Percentage of Advertised

IPv6

From >2755 IDNIC Members
(August 2021)

IDNIC
Product Development

Asosiasi Penyelenggara Jasa Internet Indonesia
INDONESIA INTERNET SERVICE PROVIDER ASSOCIATION

IDNIC
indonesia network information centre

What is KADABRA?

KADABRA is a smart routing analyzer, collector and platform at IDNIC in charge of collecting data and information from the internet in Indonesia, grouping and visualizing the results to the public.

- **Historical Incidents**
- **The first Public Validator in Indonesia**
- **Modular Concept**

KADABRA Milestones

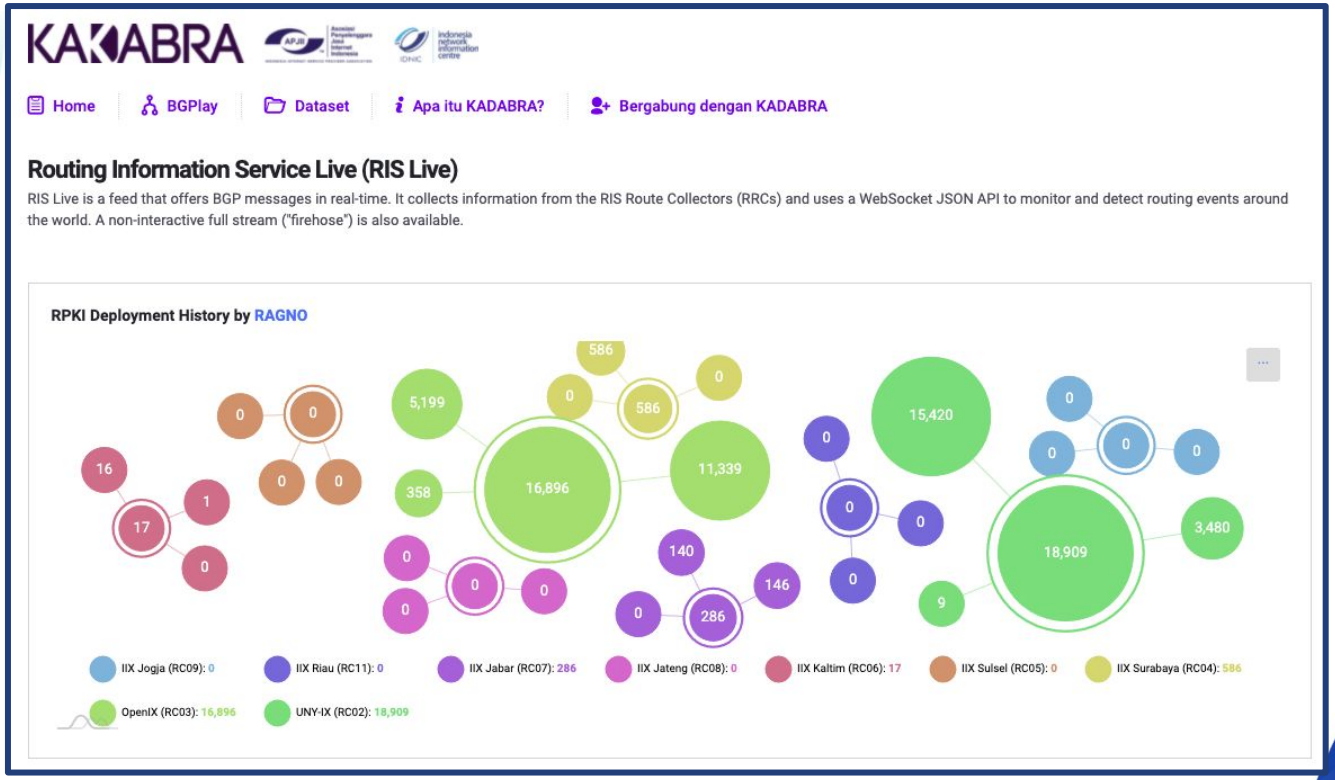
2021 — Launched in all parts of Indonesia through IIX APJII

2020 — Making KADABRA v2 with significant progress and integration plans with third-party services

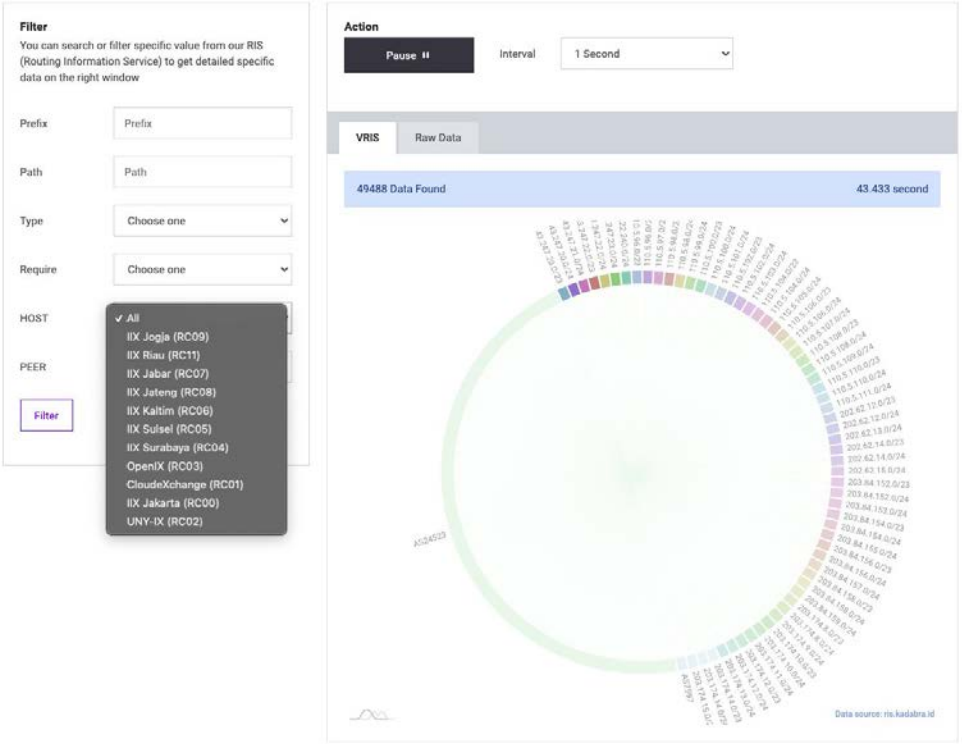
2019 — KADABRA was first created by collaborated with RIPE NCC (RIPE Atlas Projects)

Read more about KADABRA & Kyu Milestones

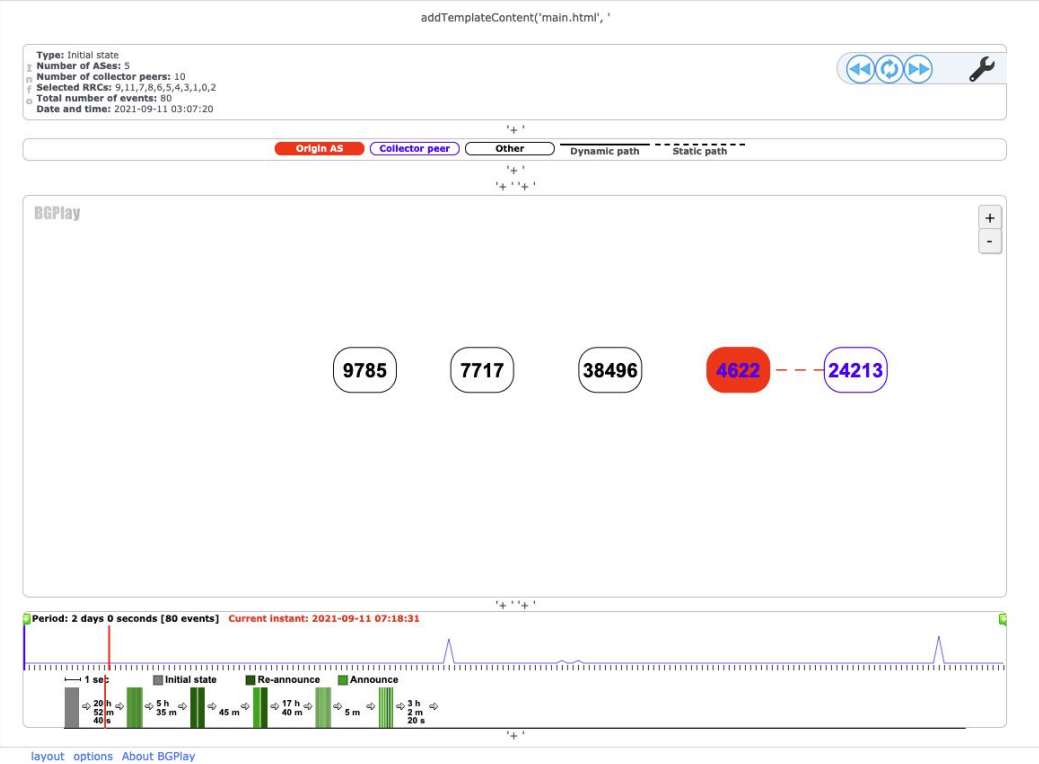
KADABRA Dashboard



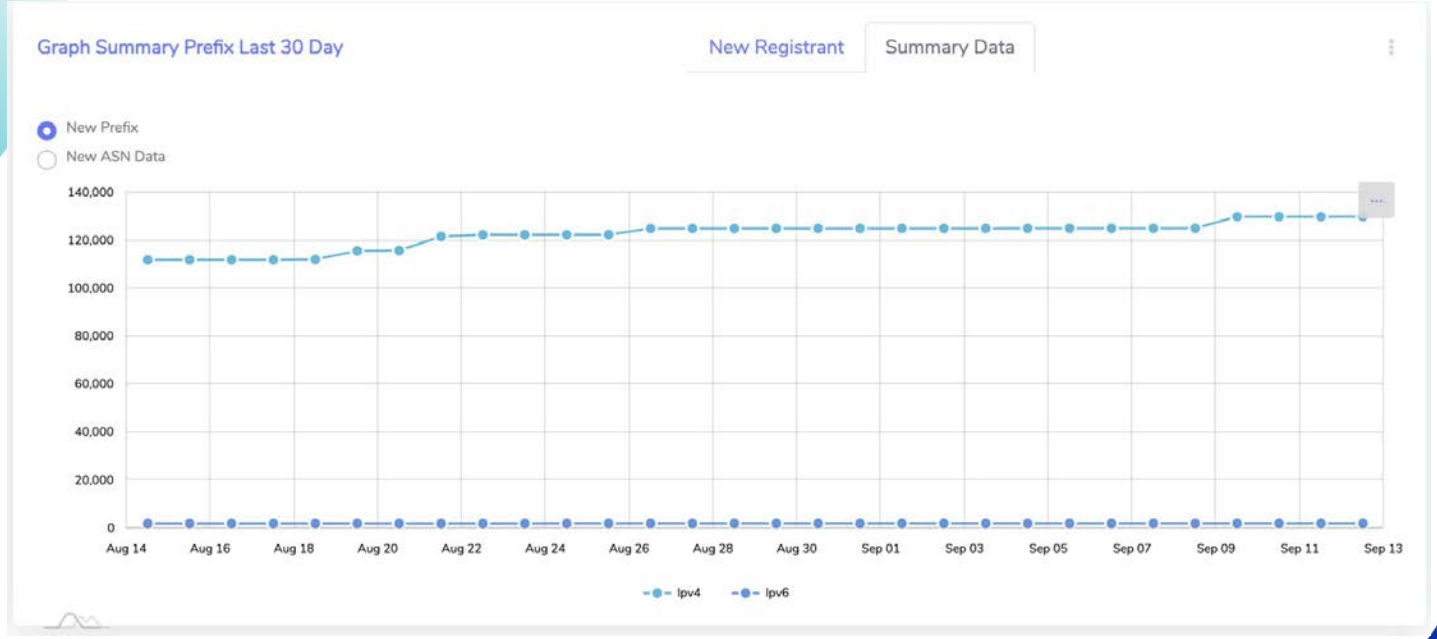
KADABRA RIS


Filter
You can search or filter specific value from our RIS (Routing Information Service) to get detailed specific data on the right window
Prefix
Prefix
Path
Path
Type
Choose one
Require
Choose one
HOST
PEER
Filter
All
IIX Jogja (RC09)
IIX Riau (RC11)
IIX Jabar (RC07)
IIX Jateng (RC08)
IIX Kaltim (RC06)
IIX Sulsel (RC05)
IIX Surabaya (RC04)
OpenIX (RC03)
CloudeXchange (RC01)
IIX Jakarta (RC00)
UNY-IX (RC02)
Action
Pause
Interval
1 Second
VRIS
Raw Data
49488 Data Found
43.433 second
Data source: ris.kadabra.id

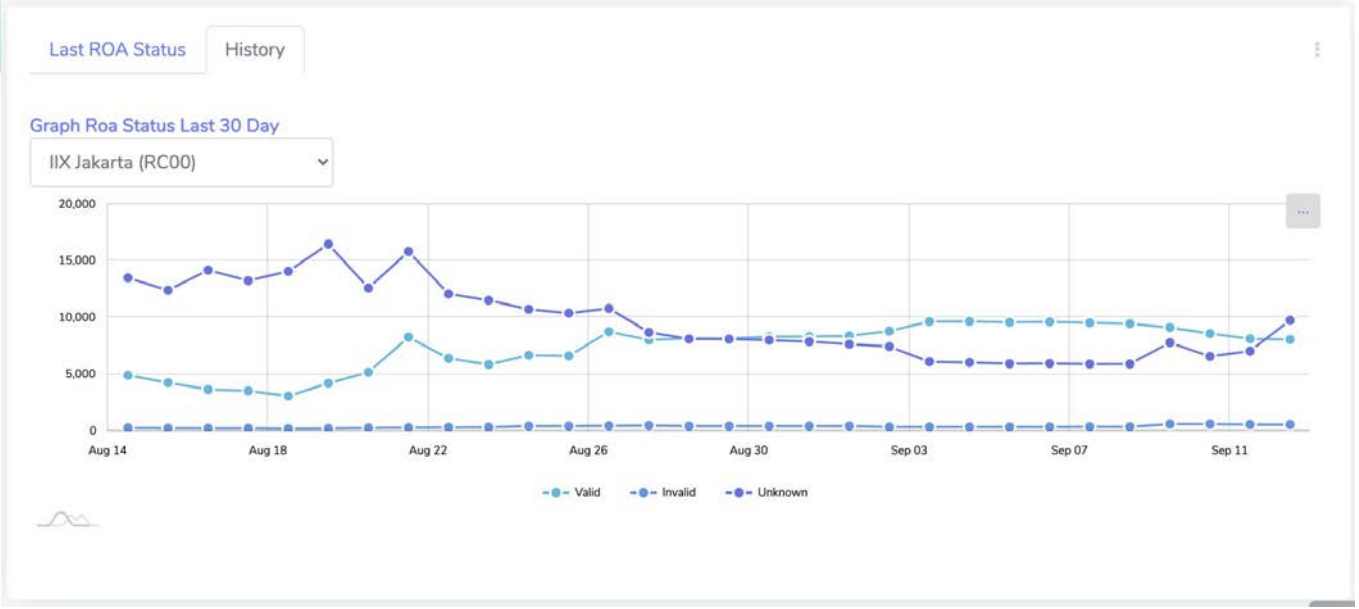
KAKABRA BGPlay



KAKABRA RAGNO



KAKABRA RAGNO



Asosiasi Penyelenggara Jasa Internet Indonesia
INDONESIA INTERNET SERVICE PROVIDER ASSOCIATION

indonesia network information centre
IDNIC

KAKABRA RAGNO

No	Date	Prefix	Source	AS Number
1	2021-09-13	45.115.73.32/28	OpenIX	58731
2	2021-09-13	45.115.73.0/28	OpenIX	58731
3	2021-09-13	45.115.73.16/28	OpenIX	58731
4	2021-09-13	45.115.73.48/28	OpenIX	58731
5	2021-09-13	175.184.233.208/30	OpenIX	9341
6	2021-09-13	180.178.94.128/25	OpenIX	45722
7	2021-09-13	180.178.94.0/25	OpenIX	45722
8	2021-09-13	103.163.140.252/30	OpenIX	141901
9	2021-09-13	163.181.26.245/32	OpenIX	24429
10	2021-09-13	103.162.144.48/30	IIX Jakarta	141654

Previous 1 2 3 4 5 ... 9 Next

KADABRA 2020-2021

2021 **9** Exchanges

2020 **5** → **8** Cities

4

Total eXchange Connected

IIX (Jatim, Jabar, Sulsel, Kaltim, Jateng, Jakarta), OpenIXP, CXC, UNY-IX

96.655

Total Prefixed Monitor

Analyzed in 9s (including roa status check)

2020 **4** → 2021 **6** Engineers Involved

Cloud Engineer, Database Engineer, Application Developer, Network Engineer, dan Project Manager.

2021 **172**

Total Replication

Across 8 services

UP TO 2020 **33K** → 2021 **62K**

Total request/second

UP TO 2020 **136** →

Total Replication

Across 5 services

UP TO **SIX**

Cloud Providers Involved

JETDINO, BIZNET, Cloudflare, Alibaba, Google Cloud, Amazon AWS

Whats Next ?

Service Gateway

Realtime Resources Tracker

Indicent Status

Extra Miles

2023 — What's Next ? Stay tune for KADABRA next release(s)

2022 — Launch KADABRA STATUS into public

2021 — Initiate some enhancements for KADABRA STATUS, KADABRA Statistics and IXP Prefix Check

Read more about KADABRA & Kyu Milestones

What is Kyu?

Kyu is IaaS (Integration as a Provider) or what can be called IDNIC Business Intelligence. Will have a dashboard to monitor all IDNIC services that will be integrated with 3rd-party (eg government, either community or commercial).

Service Gateway

Source of Truth

Data Exchange Gateway

Milestones

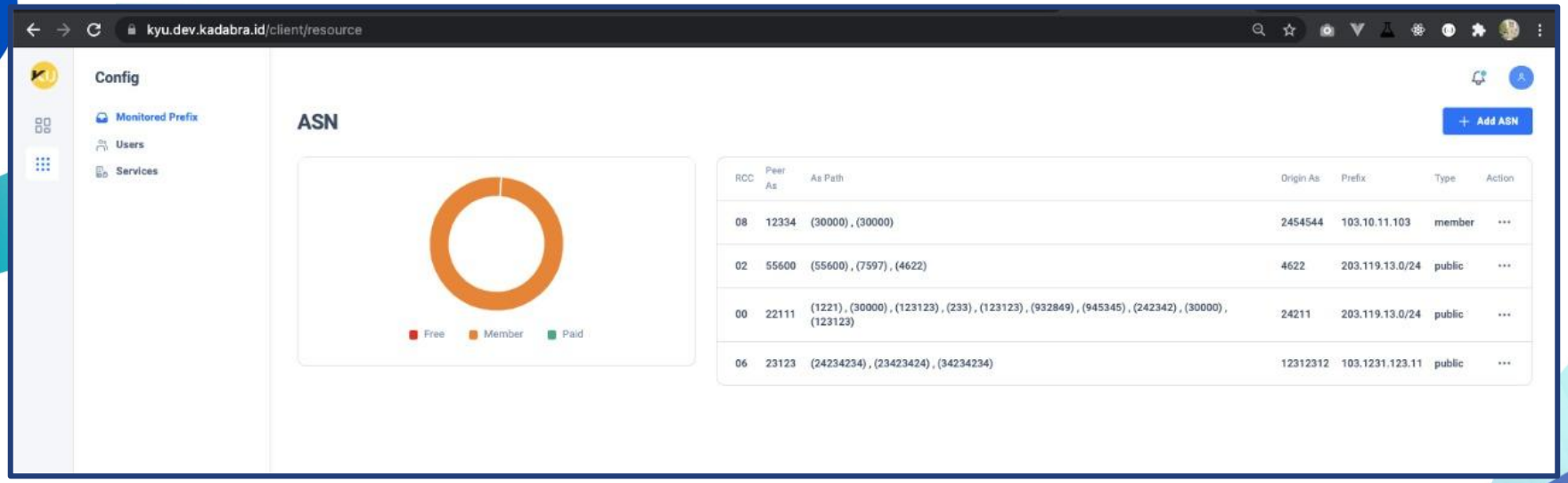
2021 — As incident's source of internet truth in Indonesia, which is integrated with MyIDNIC

2022 — Integrated with NIR, RIR, Government, education and private sector.

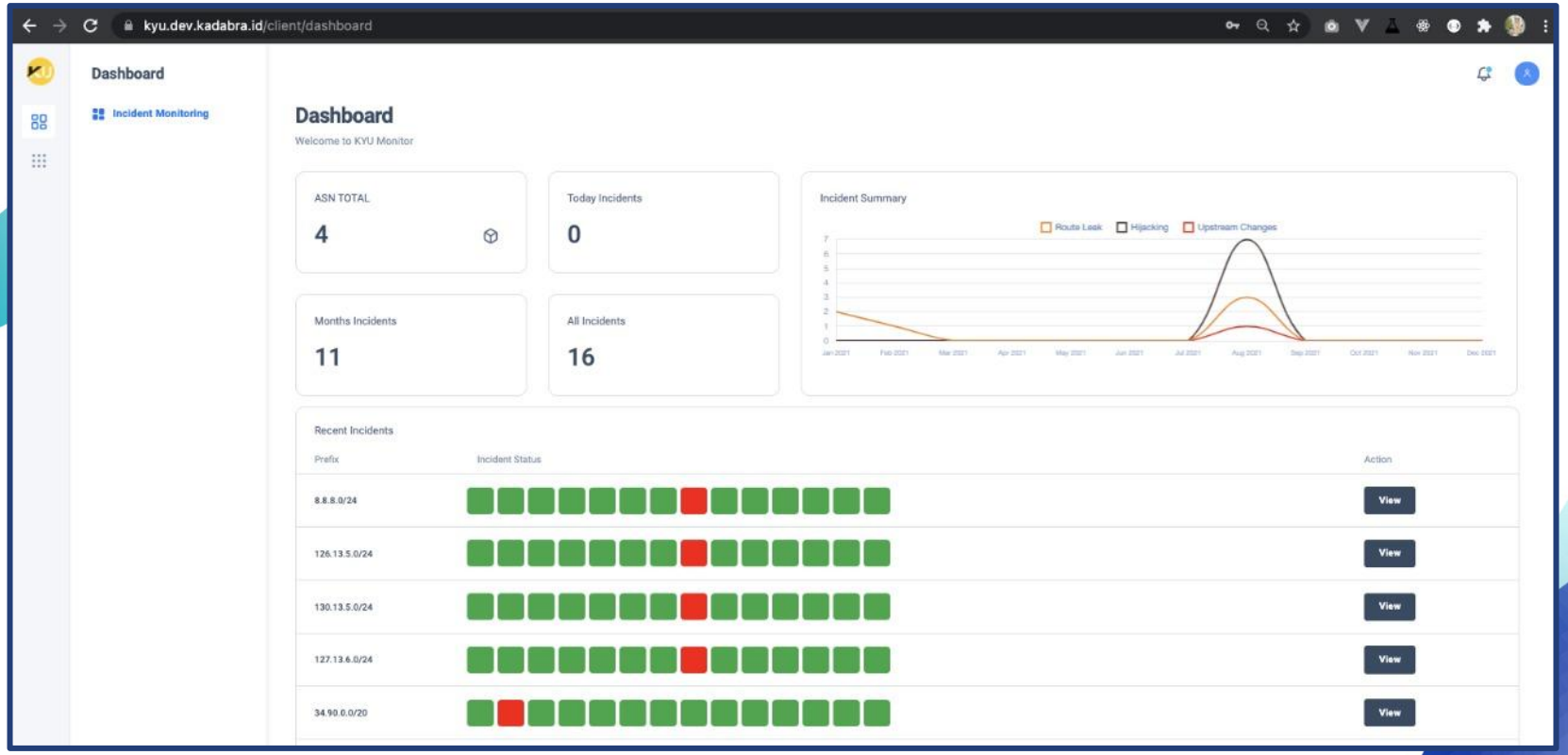
2023 — IDNIC Big Data

Read more about KADABRA & Kyu Milestones

Dashboard


kyu.dev.kadabra.id/client/resource
Config
Monitored Prefix
Users
Services
ASN
Add ASN
Free
Member
Paid
RCC
Peer As
As Path
Origin As
Prefix
Type
Action
08 12334 (30000) , (30000) 2454544 103.10.11.103 member
02 55600 (55600) , (7597) , (4622) 4622 203.119.13.0/24 public
00 22111 (1221) , (30000) , (123123) , (233) , (123123) , (932849) , (945345) , (242342) , (30000) , (123123) 24211 203.119.13.0/24 public
06 23123 (24234234) , (23423424) , (34234234) 12312312 103.1231.123.11 public

KYU Dashboard



Possibility to collaborate on product development?

Email to :
sekretariat@idnic.net

Training & Workshop

IDNIC Webinar Series 2021

5 Courses

- Info Sec
- BGP
- BGP RPKI
- IPv6
- IRM

2 Series

- March
- August

>663 Total Participants

HANDS ON VIRTUAL LAB

>3000 Livestream Views

Subscribe our Youtube

Info IDNIC

IDNIC Academy

What is IDNIC Academy?

IDNIC Academy is an independent learning platform for IDNIC members regarding online information technology knowledge with a basic to advanced level curriculum designed by experienced trainers. Aims to assist network operators, trainers, and regulators in understanding network practices, principles, and techniques, as well as managing Internet resources and using Internet technology effectively and efficiently.

Milestones

2021

The process of working on 8 additional materials in 2021 and is open to the public.

2020

Planning and development process in early 2020, Launching November 26, 2020, 2 materials have been published

Visit IDNIC Academy at

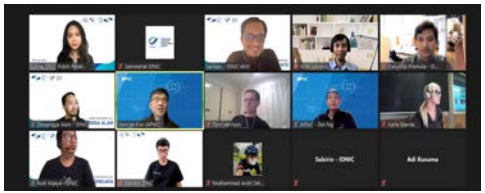
https://academy.idnic.net/

- E-Certificate
- 750+ Users
- Virtual Lab
- Available Free
- Many courses upcoming

Cooperating with APNIC & NIRs

IDNIC - VNNIC

Joint discussion with VNNIC discussing IPv6 implementation in Vietnam. Through these discussions, IDNIC gained information and insight on how to implement IPv6 in Vietnam.



IDNIC - APNIC

IDNIC and APNIC provide information regarding ongoing developments such as RPKI, IPv4 & IPv6 status, policy development, product information, and others.

IDNIC - APNIC, WIDE & JPRS

IDNIC discussed with APNIC, WIDE, and JPRS about the need and implementation of M-Roots

www.idnic.net

Operational Hours
09.00-17.00 WIB

Address
Asosiasi Penyelenggara Jasa Internet Indonesia
Cyber Building 6th floor Jl. Kuningan Barat No 8
Jakarta 12710, Indonesia

Email
helpdesk@idnic.net
hostmaster@idnic.net

Telephone
(+62) 21 5296 0634

Fax
(+62) 21 5296 0635

Social Media
Facebook : IDNIC | Instagram : @idnic.id | Telegram : @infoidnicapjii