KINDNS
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pronounced kindness
ICANN

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An Initiative to Promote DNS Operational Best Practices

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What Is It?

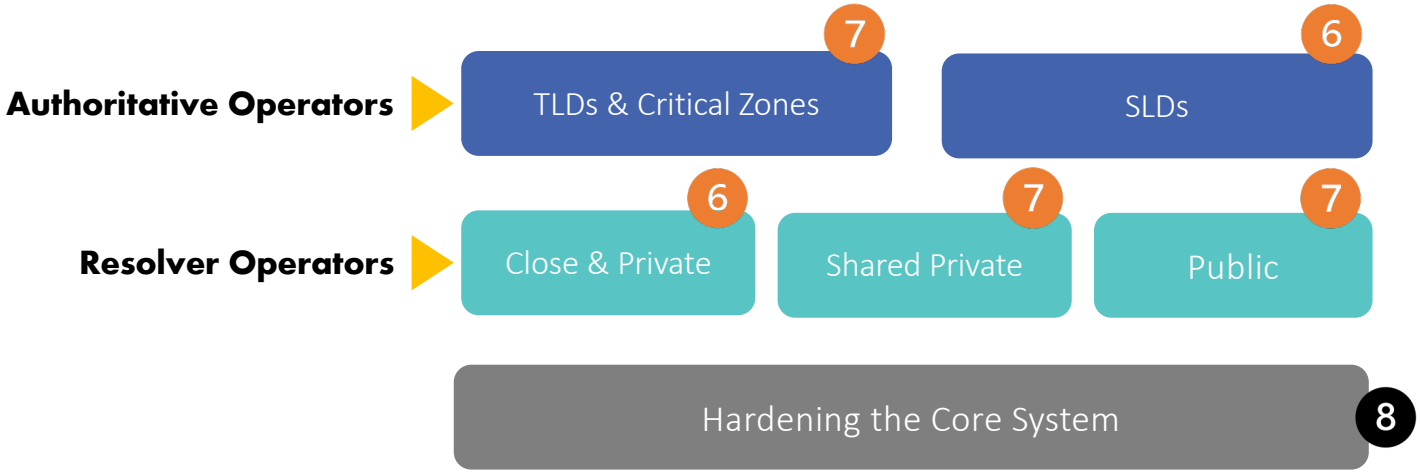
Knowledge-sharing and **I**nstantiating **N**orms for **D**NS
(Domain Name System) and **N**aming **S**ecurity

A simple framework that can help a wide variety of DNS operators, from small to large, to follow both the evolution of the DNS protocol and the best practices that the industry identifies for better security and more effective DNS operations.

*..... is pronounced "**kindness**"*

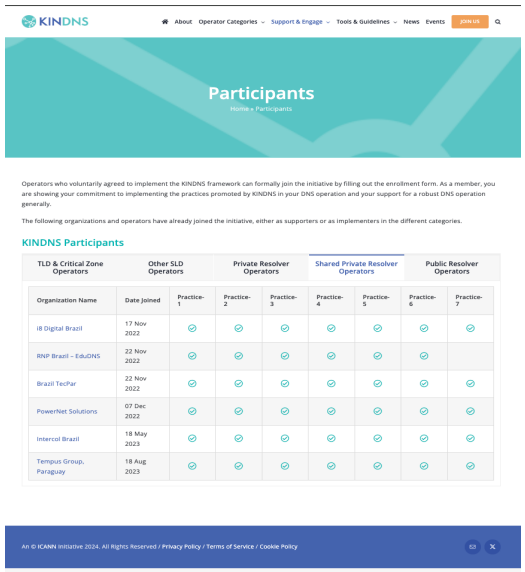
KINDNS

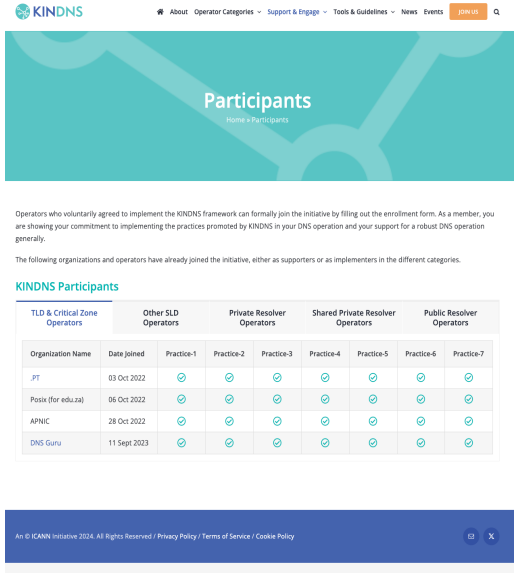
Targeted Operators



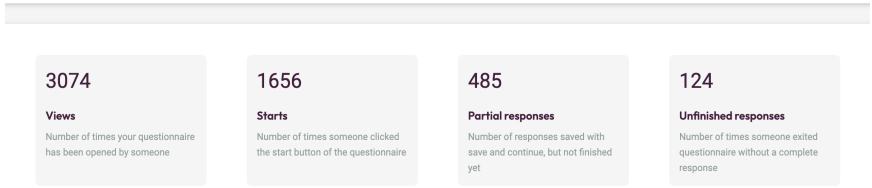
- Each category has 6-8 practices that we will encourage operators to implement. See www.kindns.org, for more details
- By joining KINDNS, DNS operators are voluntarily committing to adhere to these identified practices and act as "goodwill ambassadors" within the community.

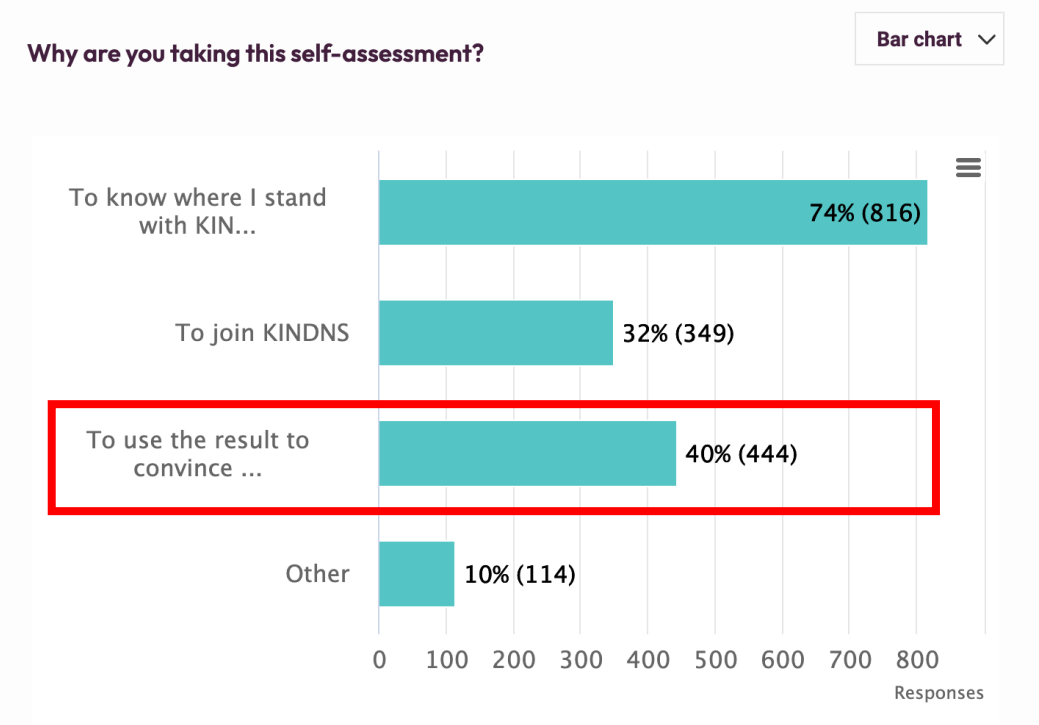
Participation/Enrollment

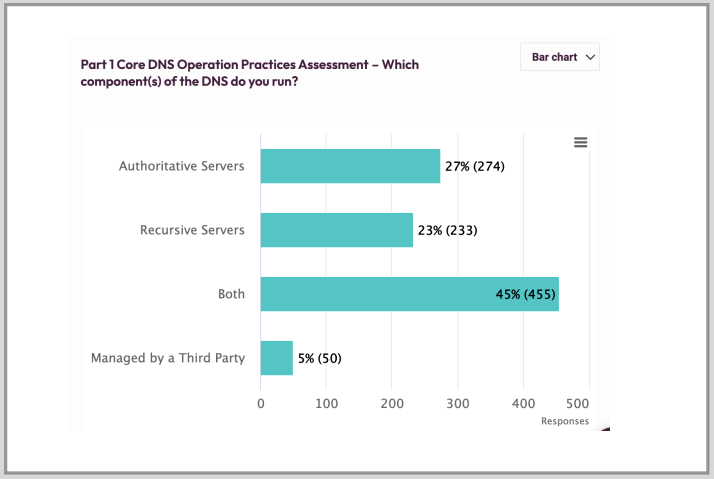


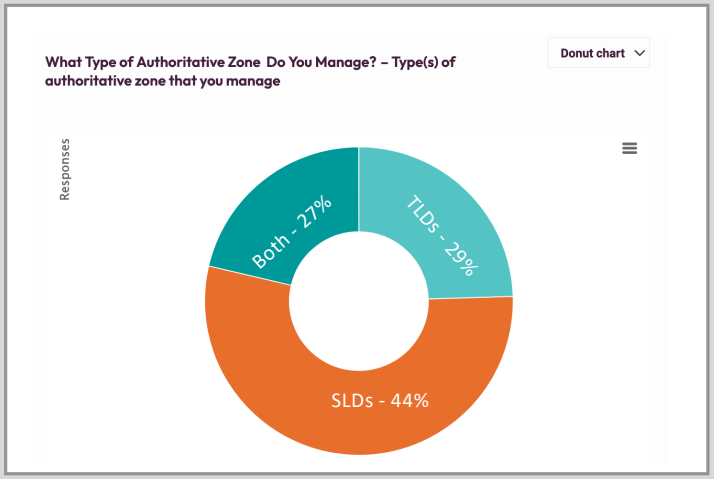


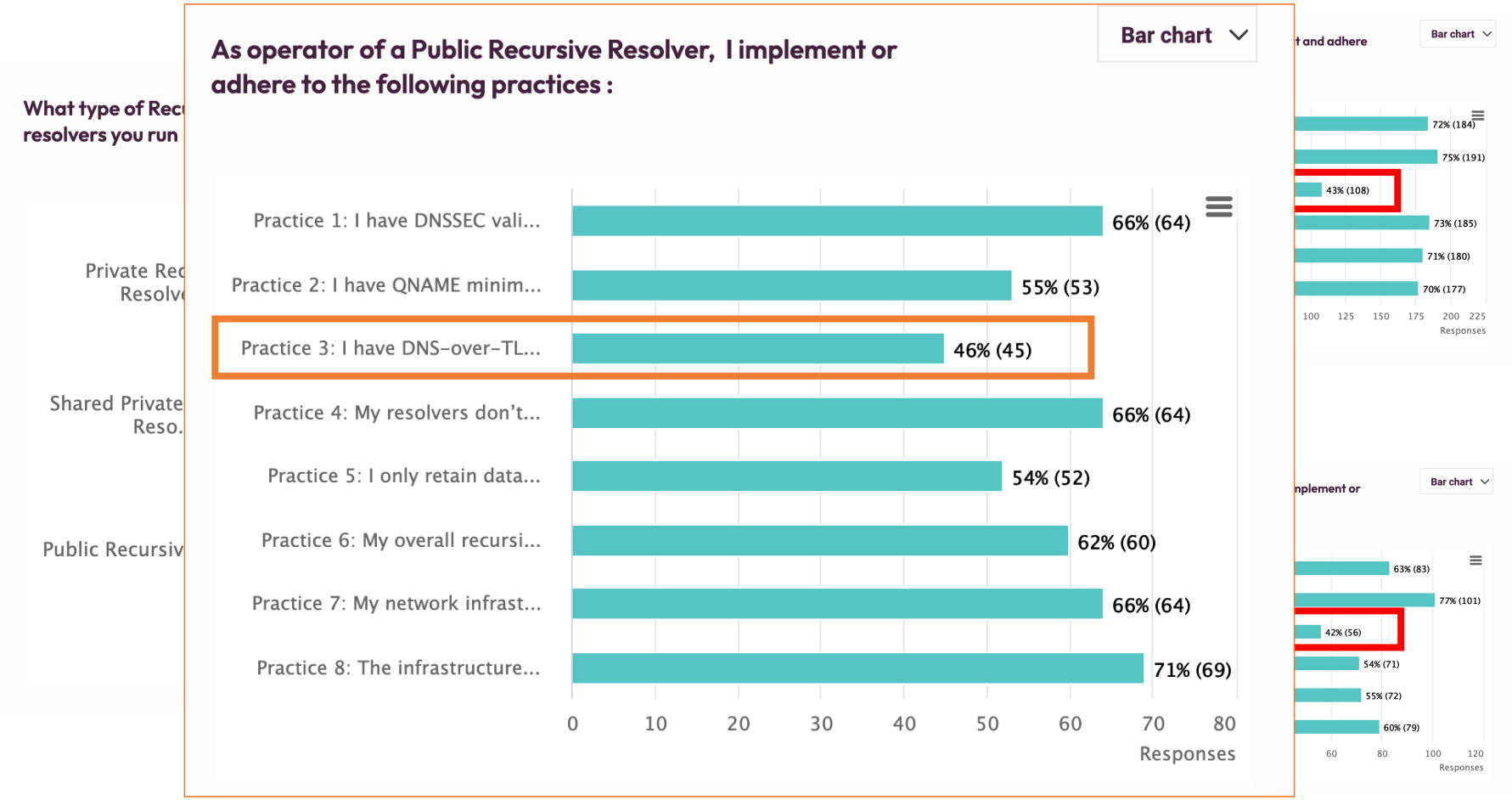
High uptake for Self-assessment




Why are you taking this self-assessment?
Bar chart
To know where I stand with KIN...
74% (816)
To join KINDNS
32% (349)
To use the result to convince ...
40% (444)
Other
10% (114)
0
100
200
300
400
500
600
700
800
Responses


Part 1 Core DNS Operation Practices Assessment – Which component(s) of the DNS do you run?
Bar chart
Authoritative Servers
27% (274)
Recursive Servers
23% (233)
Both
45% (455)
Managed by a Third Party
5% (50)
0
100
200
300
400
500
Responses


What Type of Authoritative Zone Do You Manage? – Type(s) of authoritative zone that you manage
Donut chart
Responses
Both - 27%
TLDs - 29%
SLDs - 44%


What type of Rec
resolvers you run
Private Rec
Resolv
Shared Private
Reso.
Public Recursiv
As operator of a Public Recursive Resolver, I implement or
adhere to the following practices :
Bar chart
Practice 1: I have DNSSEC vali...
66% (64)
Practice 2: I have QNAME minim...
55% (53)
Practice 3: I have DNS-over-TL...
46% (45)
Practice 4: My resolvers don't...
66% (64)
Practice 5: I only retain data...
54% (52)
Practice 6: My overall recursi...
62% (60)
Practice 7: My network infrast...
66% (64)
Practice 8: The infrastructure...
71% (69)
0 10 20 30 40 50 60 70 80
Responses
t and adhere
Bar chart
72% (184)
75% (191)
43% (108)
73% (185)
71% (180)
70% (177)
100 125 150 175 200 225
Responses
nplement or
Bar chart
63% (83)
77% (101)
42% (56)
54% (71)
55% (72)
60% (79)
60 80 100 120
Responses

KINDNS v.2 - Discussion Points

1. **Adding Response Rate Limiting (RRL)** to Authoritative Servers' practice
   - ccTLD and critical Zone Operators
   - Other SLDs too?

2. **Addressing 'Split' responsibilities** for Authoritative servers' operation:
   - Zone file content is controlled by a third party. i.e Root server operators and the root zone itself, or registrars hosting DNS for registrants

3. **Access reliability:** Reachability over IPv6, RPKI for the prefix used for the DNS servers.

4. **Steering Committee and Community review team**:
   - Volunteers to help steer the evolution KINDNS as framework and coordinate the initiative.

Outreach

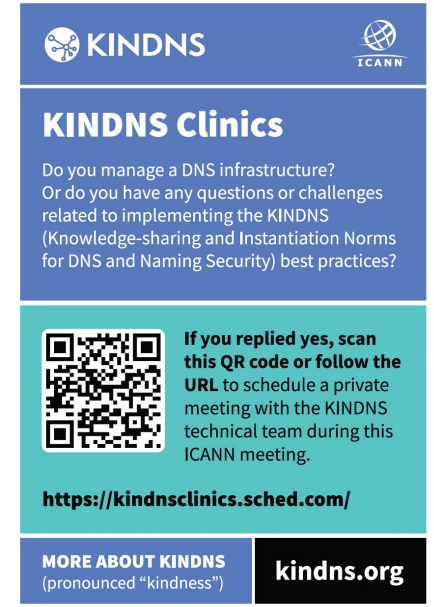
Support for More Uptake in MEA

Success story

- 70% of enrollment requests comes from LAC region
- **Success Story:** KINDNS adopted by CGI.br as DNS security framework for the country.
- Volunteers from the community to help translate KINDNS

What we are doing in every region

- More than 20 distinct KINDNS events last year.
- Use KINDNS as the framework for DNS Ecosystem security practices engagement.
- Present KINDNS at technical events (ISPs, DNS Operators, …).
- **KINDNS Clinics:** 1:1 session with Operators
- Plan training around the implementation of KINDNS practices
- Help keep the KINDNS community alive (Mailing list, soon to be launched Ambassador program, etc…)



KINDNS Clinics at ICANN79

Current Focus

Community Engagement

- **Community engagement**
  - Continue to encourage operators to get onboard to **contribute and support** the framework:
    - *Direct 1:1 Engagements (KINDNS Clinics) to get more operators to join*
    - *Continue workshops & webinars to raise awareness on KINDNS practices as part of our overall DNS ecosystem security awareness program.*
    - DNSAthon around KINDNS practices
    - Develop partnerships with programs such as MANRS and Pulse, internet.nl, etc …
- **Communication**
  - A more active communication plan to further promote KINDNS
    - Translate the web site and the self assessment form in other languages
    - Publish a series of DNS best practices dedicated blogs
    - Develop toolkits to help operators engage with internal decision-makers

Stay Informed and Contribute

Website	www.kindns.org
Twitter	https://twitter.com/4KINDNS
E-Mail	info@kindns.org
Mailing list	kindns-discuss@icann.org

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