KINDNS

Una iniciativa de la ICANN para promover las mejores prácticas operativas del DNS

ICANN

Knowledge-sharing and
Instantiating
Norms for
DNS (Domain Name System) and
Naming
Security

….. is pronounced ”kindness.”

¿De qué se trata?

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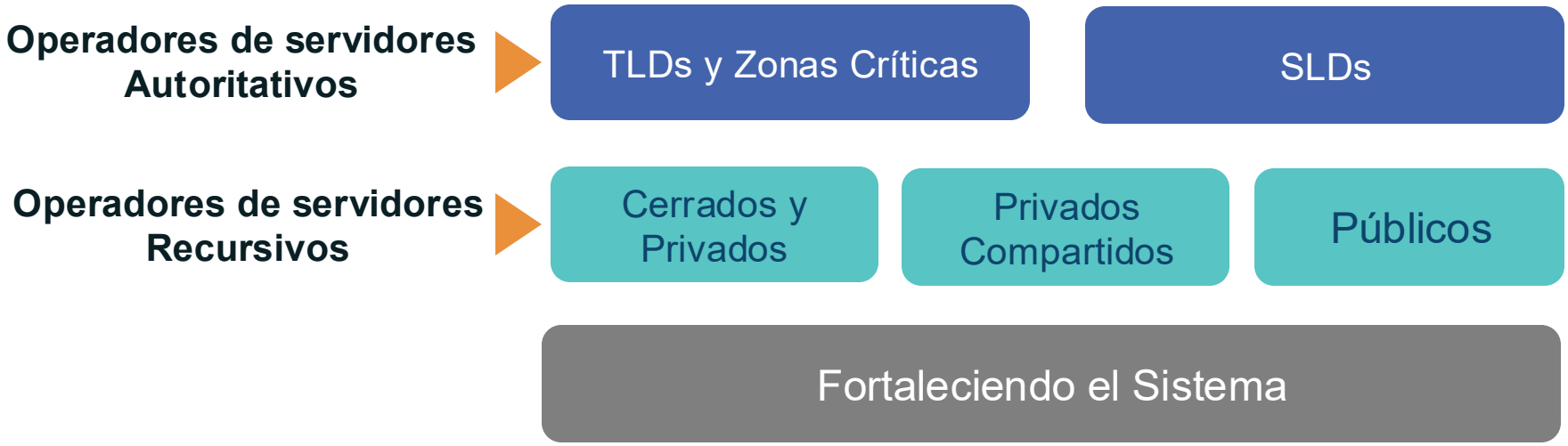
El intercambio de conocimientos y las normas de creación de instancias para el sistema de nombres de dominio y su seguridad (KINDNS) es una iniciativa lanzada por la Corporación de Internet para la Asignación de Nombres y Números (ICANN) para producir un marco simple y claro de mejores prácticas operativas para los operadores de DNS.

Operadores objetivo



Al unirse a la iniciativa KINDNS, los operadores de DNS se comprometen voluntariamente a adherirse a las prácticas identificadas y actuar como "embajadores de buena voluntad" dentro de la comunidad.

Authoritative DNS Operators of Critical Zones

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TLDs & Critical Zones

1. **MUST** be DNS Security Extensions (DNSSEC) signed and follow key management best practices.
2. **T**ransfer between authoritative servers **MUST** be limited
3. Zone file integrity **MUST** be controlled
4. Authoritative and recursive name servers **MUST run on separate infrastructure**
5. A minimum of two distinct nameservers **MUST** be used for any given zone
6. There **MUST** be diversity in the operational infrastructure: **Network, Geographical, Software**
7. The infrastructure that makes up your DNS infrastructure **MUST** be monitored

Authoritative DNS Operators for SLDs

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SLDs

1. **MUST** be DNSSEC signed and follow key management best practices
2. **T**ransfer between authoritative servers **MUST** be limited
3. Zone file integrity **MUST** be controlled
4. Authoritative and recursive name servers **MUST run on separate infrastructure**
5. A minimum of two distinct nameservers **MUST** be used for any given zone
6. Authoritative servers for a given zone **MUST** run from diversified infrastructure
7. The infrastructure that makes up your DNS infrastructure **MUST** be monitored

Closed and Private Resolver Operators

Private resolvers are not publicly accessible and cannot be reached over the open Internet. They are typically found in corporate networks or other restricted-access networks

Closed and Private resolvers

1. DNSSEC validation **MUST** be enabled
2. Access control list (ACL) statements **MUST** be used to restrict who may send recursive queries
3. QNAME minimization **MUST** be enabled
4. Authoritative and recursive name servers **MUST** run on separate infrastructure
5. At least two distinct servers **MUST** be used for providing recursion services
6. Authoritative servers for a given zone **MUST** run from diversified infrastructure
7. The infrastructure that makes up your DNS infrastructure **MUST** be monitored

Shared Private Resolver Operators

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Shared private resolver operators are typically Internet service providers (ISPs) or similar hosting service providers. They offer DNS resolution services to their customers (mobile, cable/DSL/fiber users, as well as hosted servers and applications).

Shared Private resolvers

1. DNSSEC validation **MUST** be enabled
2. ACL statements **MUST** be used to restrict who may send recursive queries
3. QNAME minimization **MUST** be enabled
4. Authoritative and recursive nameservers **MUST** run on separate infrastructure
5. At least two distinct servers **MUST** be used for providing recursion services
6. The infrastructure that make up your DNS infrastructure **MUST** be monitored
7. **For pr**ivacy consideration: Encryption (DOH or DoT) **SHOULD** be enabled
8. Private resolver operators **SHOULD** have software diversity

Public Resolver Operators

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This category includes both open and closed public resolvers. Closed public resolvers are typically commercial DNS filtering/scrubbing services, such as DNSFilter and OpenDNS.

Shared Private resolvers

1. DNSSEC validation **MUST** be enabled
2. QNAME minimization **MUST** be enabled
3. **For** privacy considerations: Encryption (DOH or DoT) **SHOULD** be enabled
4. Authoritative and recursive nameservers **MUST** run on separate infrastructure
5. Data collected through the passive logging of DNS queries **MUST** be limited
6. At least two distinct servers **MUST** be used for providing recursion services
7. Public resolver operators **MUST** ensure operational diversity in their infrastructure.
8. The infrastructure that makes up your DNS infrastructure **MUST** be monitored

Self-Assessment Reports

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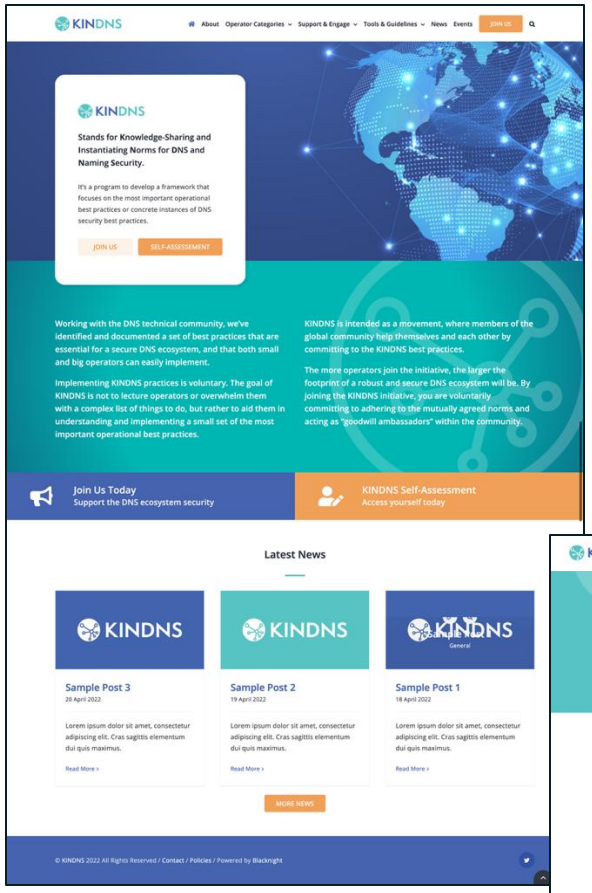
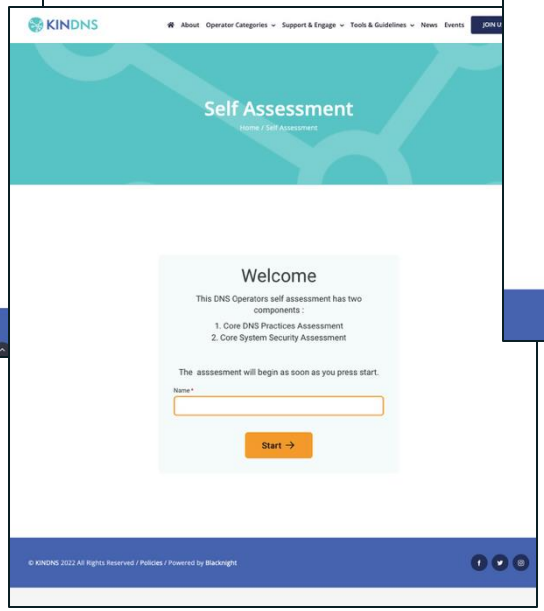
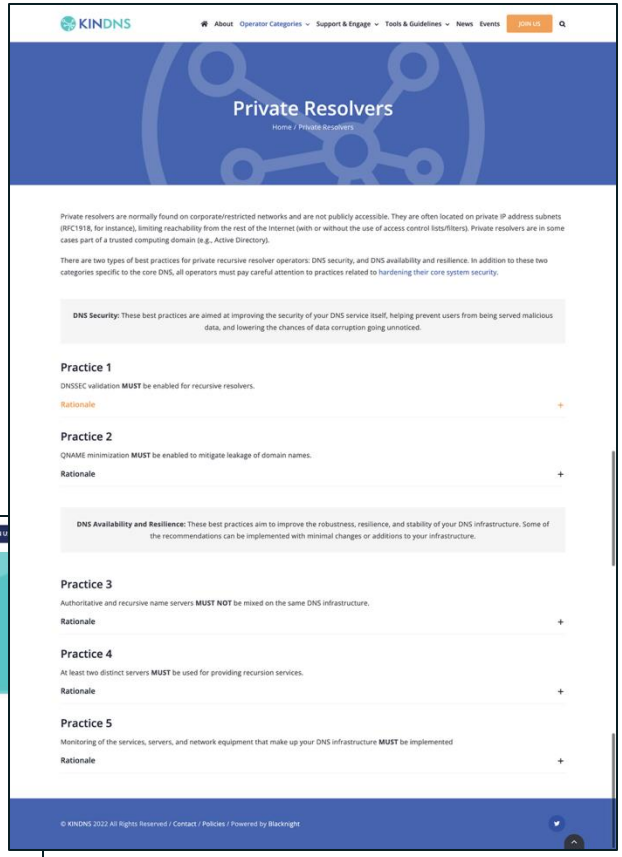
Website – kindns.org (kindns.club)







4. Reconhecimentos

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About | Operator Categories | Support & Engage

Organization Name	Practice-1	Practice-2	Practice-3	Practice-4
i8 Digital Brazil	✓	✓	✓	✓
RNP Brazil – EduDNS	✓	✓	✓	✓
Brazil TecPar	✓	✓	✓	✓
PowerNet Solutions	✓	✓	✓	✓
Intercol Brazil	✓	✓	✓	✓
Tempus Group, Paraguay	✓	✓	✓	✓
NETServ	✓	✓	✓	✓
REDESIM	✓	✓	✓	✓
MTN Ghana	✓	✓	✓	✓
LCI Telecom	✓	✓	✓	✓
RR64 Brazil	✓	✓	✓	✓
RUPI Telecom	✓	✓	✓	✓

Qual é o site?

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An ICANN Initiative

https://kindns.org

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One World, One Internet

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