



IANA Updates

ARIN 56

30 October 2025

IANA 2030: Three main pillars

Innovation: Monitor emerging technologies and adopt new approaches to enhance agility and modernize core systems.

Operational Excellence: Strengthen security and performance, automate processes, build staff capabilities, and mature delivery practices.

Community Engagement: Broaden and deepen stakeholder relationships, co-create solutions, and boost global participation.

Learn more: [IANA 2030 Strategy](#)

Policy-Driven Priorities

- **Next round of gTLDs:** System readiness for Temporary Delegations and Variants.
- Other policy implementation work includes: **ccTLD review mechanisms** and implement **variant top-level domains (used for IDNs)**.
- Investigate potential work for IANA to participate in **RPKI for reserved or special use space**.

IANA Website Modernization

- Deliver a **new design and structure** for the website.
- Improved **system responsiveness** and experience for a global audience
- Develop and publish **content that supports user workflows**



The global coordination of the DNS Root, IP addressing, and other Internet protocol resources is performed as the Internet Assigned Numbers Authority (IANA) functions. [Learn more.](#)

Domain Names

Management of the DNS Root Zone (assignments of ccTLDs and gTLDs) along with other functions such as the .int and .arpa zones.

- Root Zone Management
- Database of Top Level Domains
- .int Registry
- .arpa Registry
- IDN Practices Repository

Number Resources

Coordination of the global IP and AS number spaces, such as allocations made to Regional Internet Registries.

- IP Addresses & AS Numbers
- Network abuse Information

Protocol Assignments

The central repository for protocol name and number registries used in many Internet protocols.

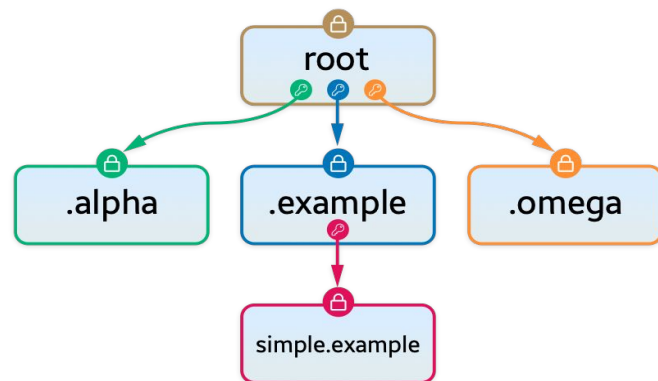
- Protocol Registries
- Apply for an assignment
- Time Zone Database

Data Publication Enhancements

- **Registry data** sets available in other formats
 - Expect to see **JSON** across all registries, including the top-level domain registry.
 - **Initial** version available at beta.iana.org
- Publication of **.arpa** domains in the **RDAP bootstrap**
 - Important to publish as ICANN plans to **sunset WHOIS**.
 - Queries for **reverse names** to be directed to **relevant RIR**.

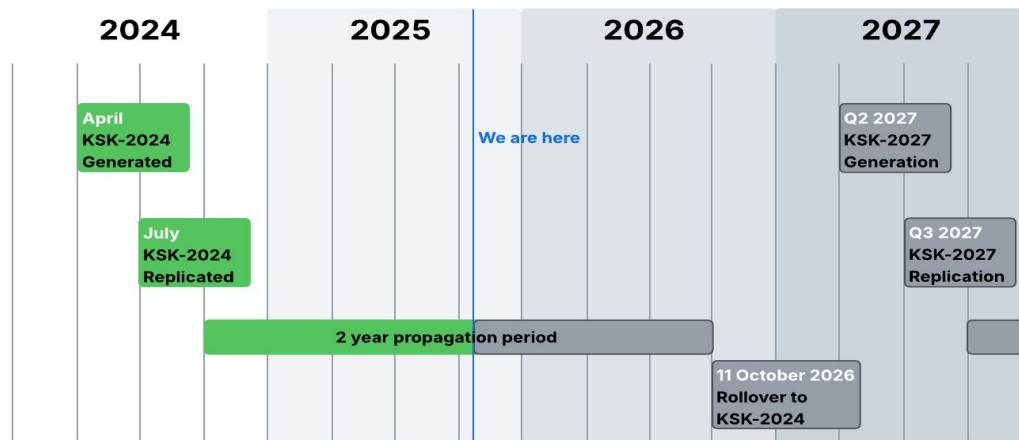
DNSSEC Overview

- DNS Security Extensions (DNSSEC) is a hierarchical public key cryptography system that matches the hierarchical delegation of the DNS itself
- At the top of this hierarchy is the **Root Zone Key Signing Key (KSK)**, the single **trust anchor** for the DNSSEC system
- The IANA team manages this key through a highly transparent process, including **public key signing ceremonies** and an **open design model**



Updating the key

- We are currently undertaking the **second-ever rollover** of the Root Zone KSK
 - Highly orchestrated process, propagation to all validators through vendor updates, etc.
 - Delayed due to (a) COVID, and (b) key hardware vendor change; but now underway
- Establishes a **3-year rollover cycle**, with new algorithm potential in **2027**



*Rollover scheduled for **11 October 2026**

Calls to Action

DNS Trust Anchor Availability

- The **trust anchor** is available for distribution (XML file)
 - Most users adopt it automatically via software updates
 - Published in the DNS itself since 11 January 2025
 - **Operators should monitor** their systems have adopted new key

 <https://www.iana.org/dnssec/files>

Root Zone KSK Algorithm Rollover

- Proposal to change the **Root Zone KSK Algorithm**
 - RSA/SHA-256 —→ ECDSA Curve P-256 with SHA-256
 - Public comment period set to open February 2026

