

Engaging with ICANN

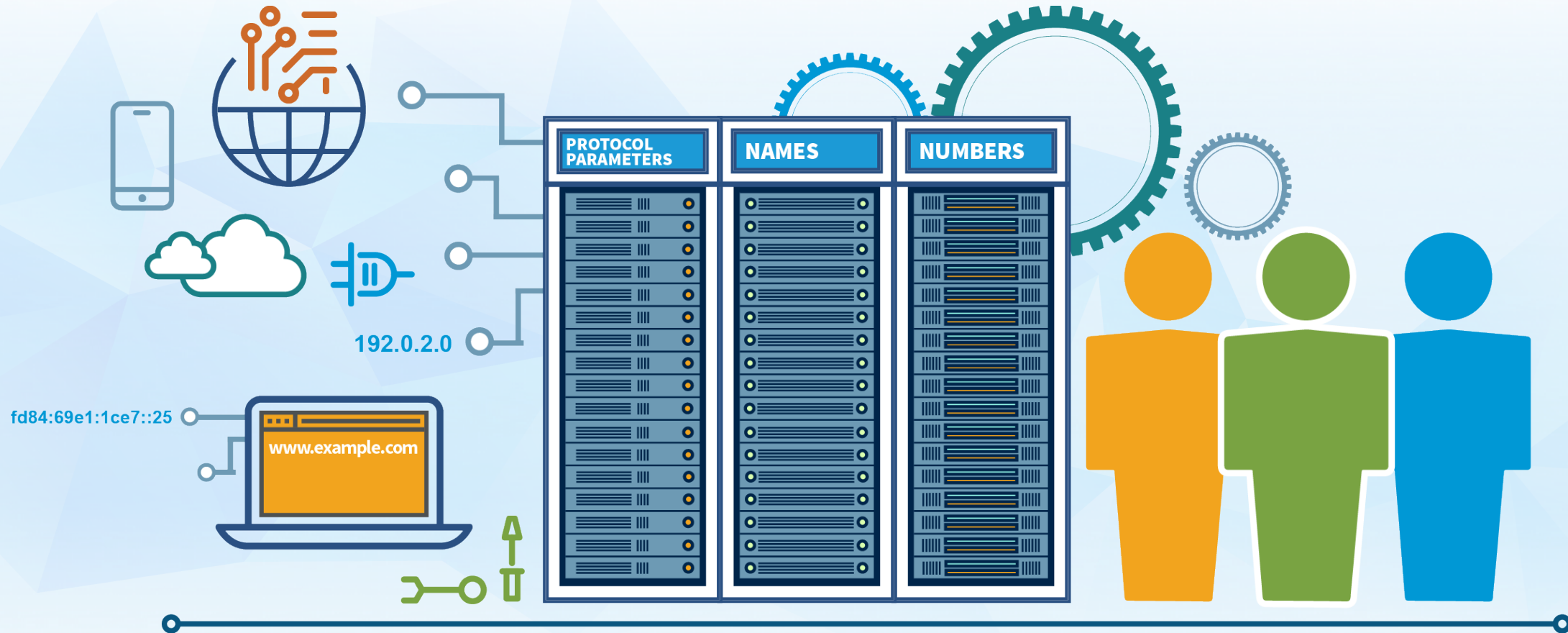
LKNOG1, Colombo – Sri Lanka

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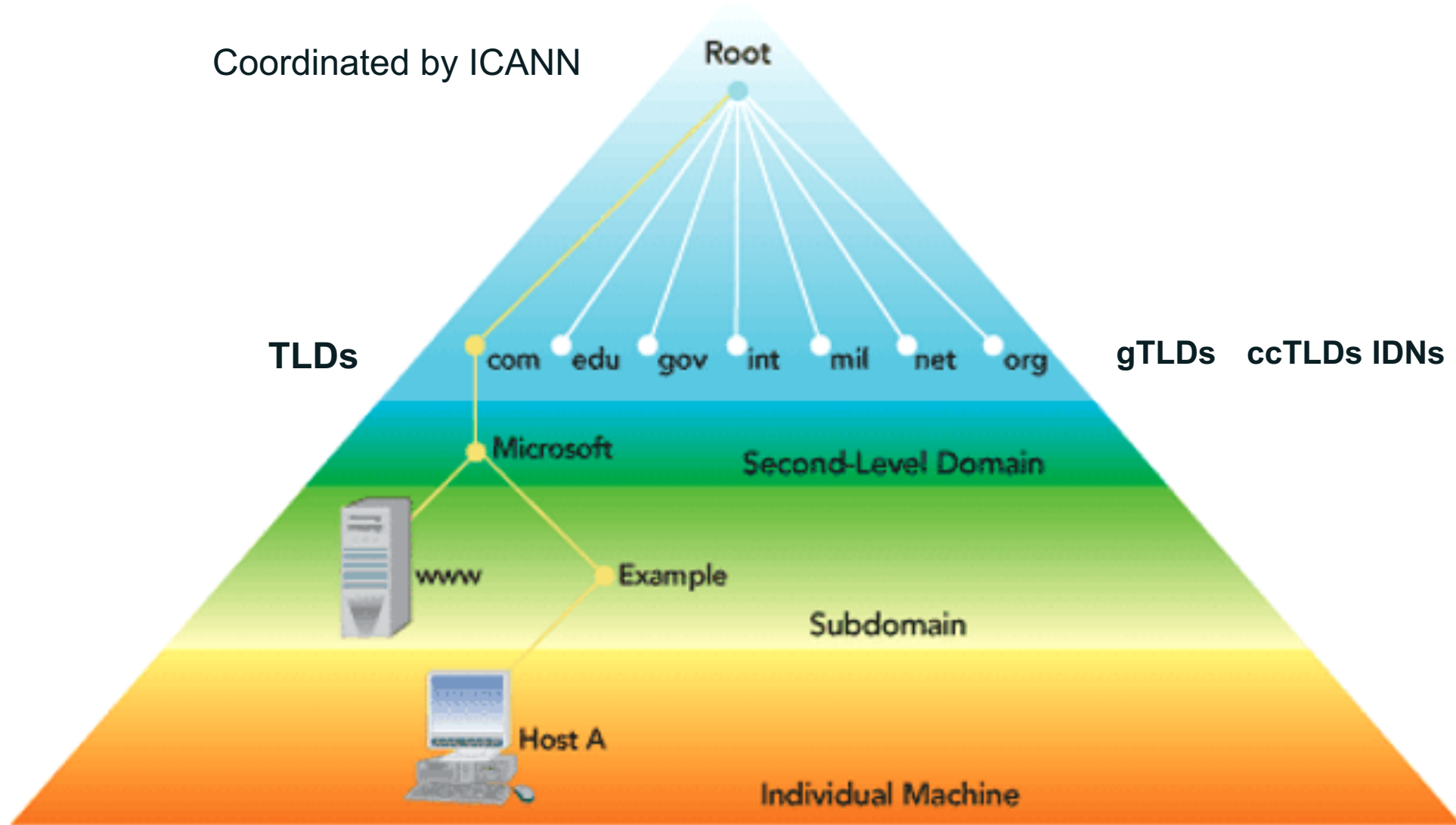
20 October 2017



Overview



Domain Name System (DNS)



Internationalized Domain Names (IDNs)

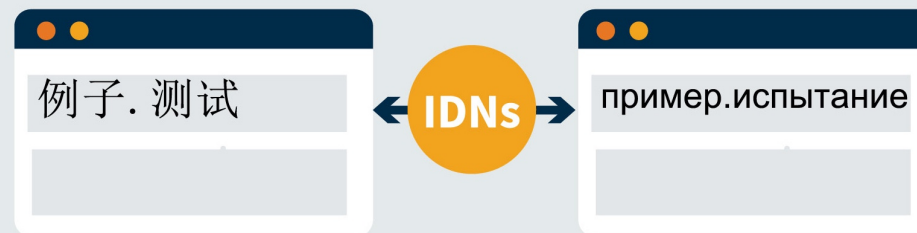
An Internationalized Domain Name (IDN) uses a particular encoding and format to allow a wider range of scripts to represent domain names.

Until late 2009, Top-Level Domains were restricted to only the Latin letters a to z without accents or symbols. After 2009, IDN TLDs were introduced in other scripts including Arabic, Chinese and Cyrillic scripts.

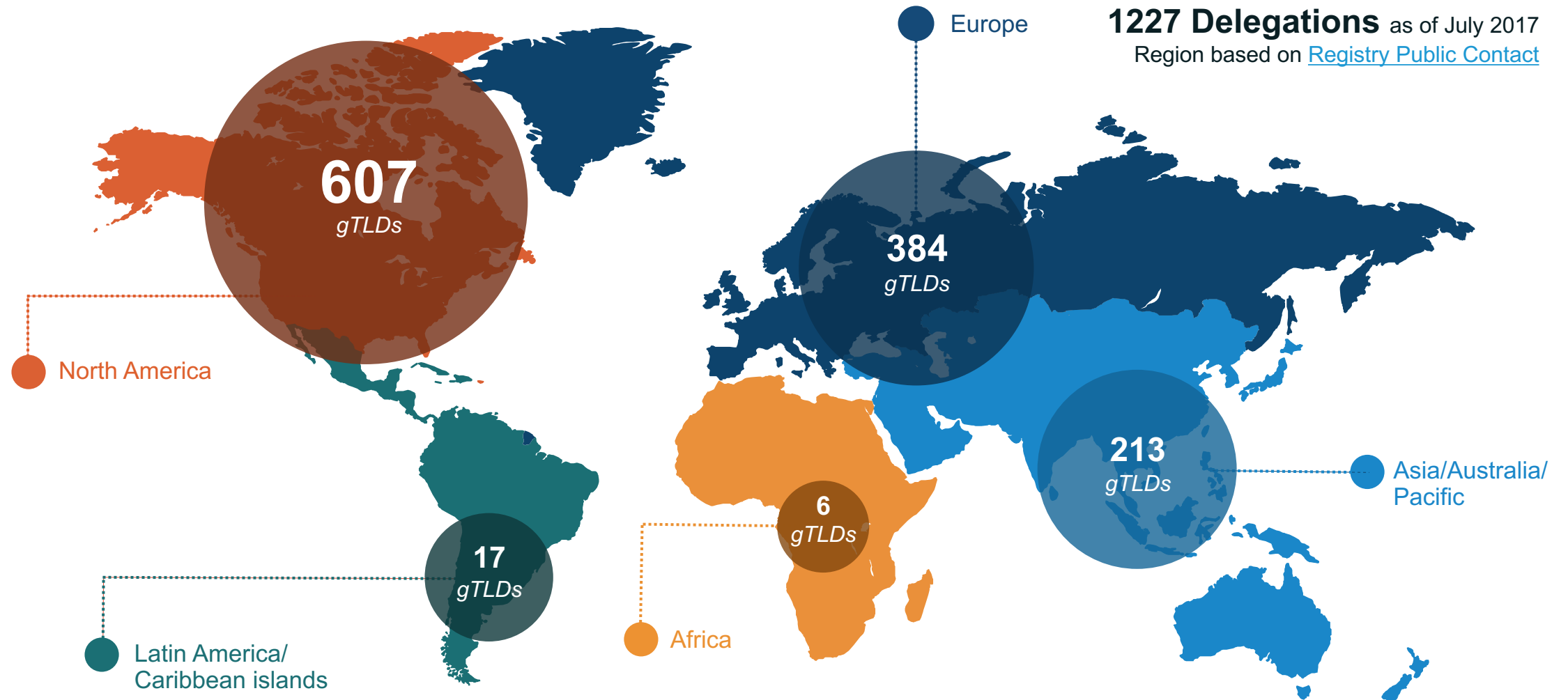
IDN TLDs can be either ccTLDs or gTLDs.

Internationalized Domain Names

Domain names with non-Latin characters or Latin characters beyond letters (a to z) digits (0 to 9) and hyphen (-), as allowed by relevant protocols.



Delegated gTLDs by ICANN Region



All domain names should be treated equally.

Including:



пример.рф

Internationalized
Domain Names



site.example

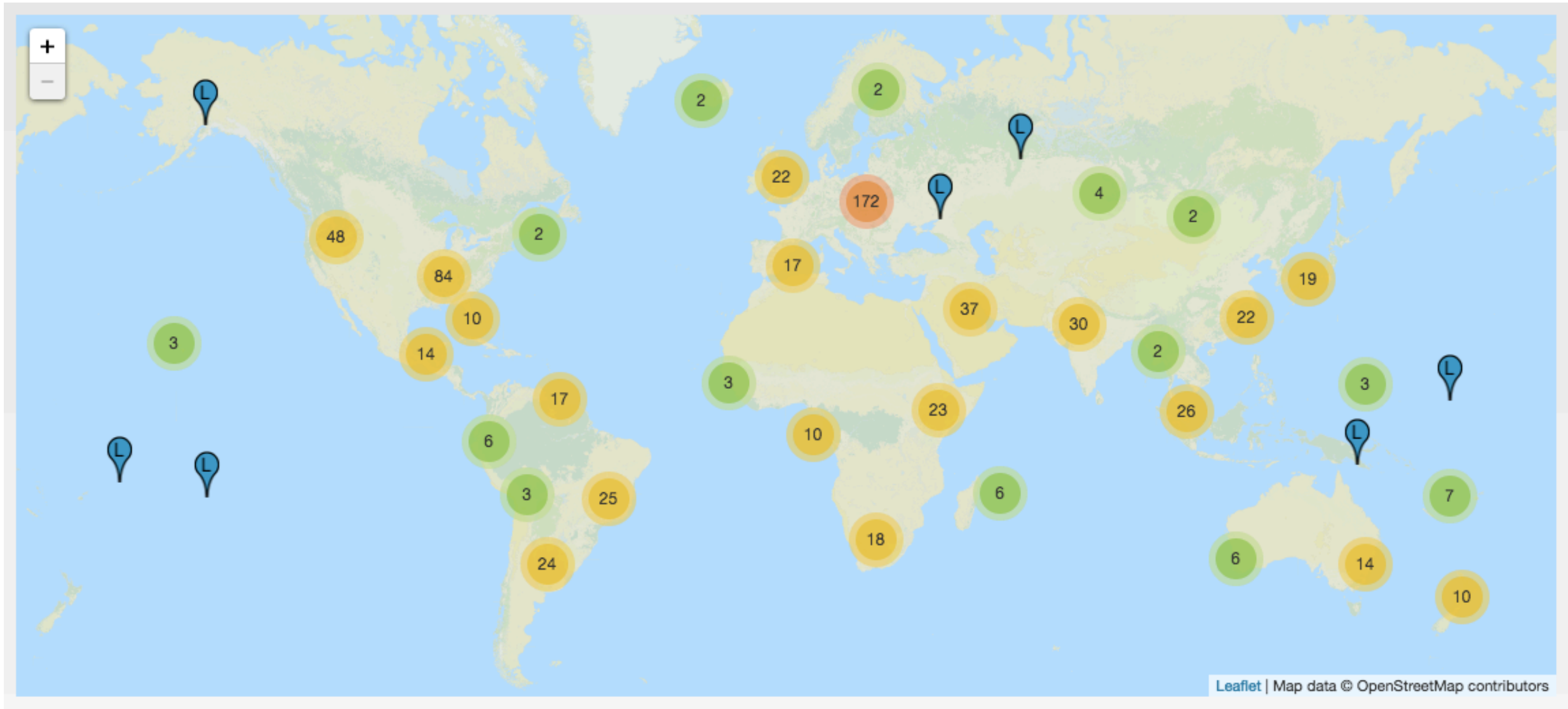
New gTLDs



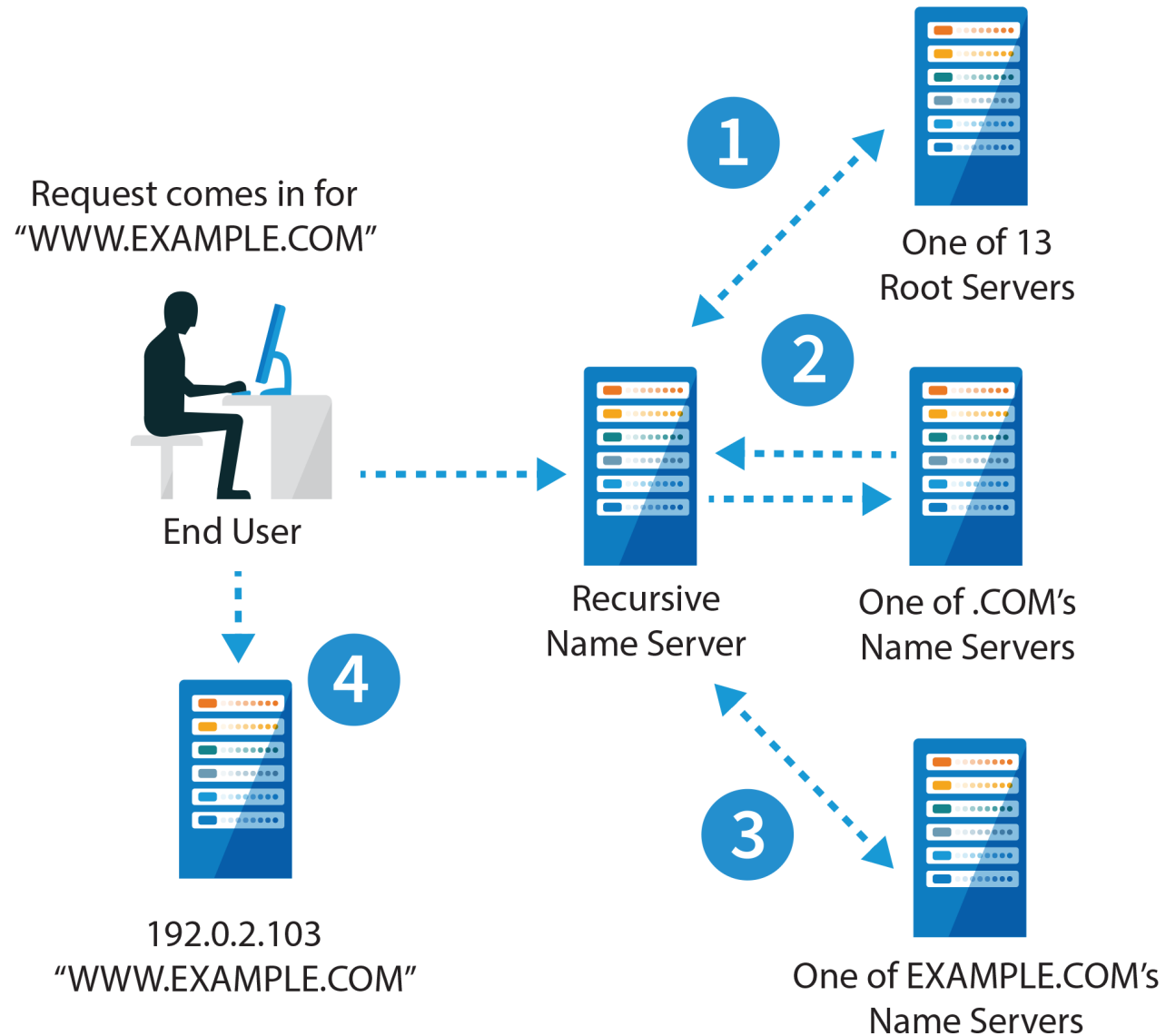
名称@网站.域名

Internationalized
Email Addresses

Operating a Secure, Stable and a Resilient Root Server System

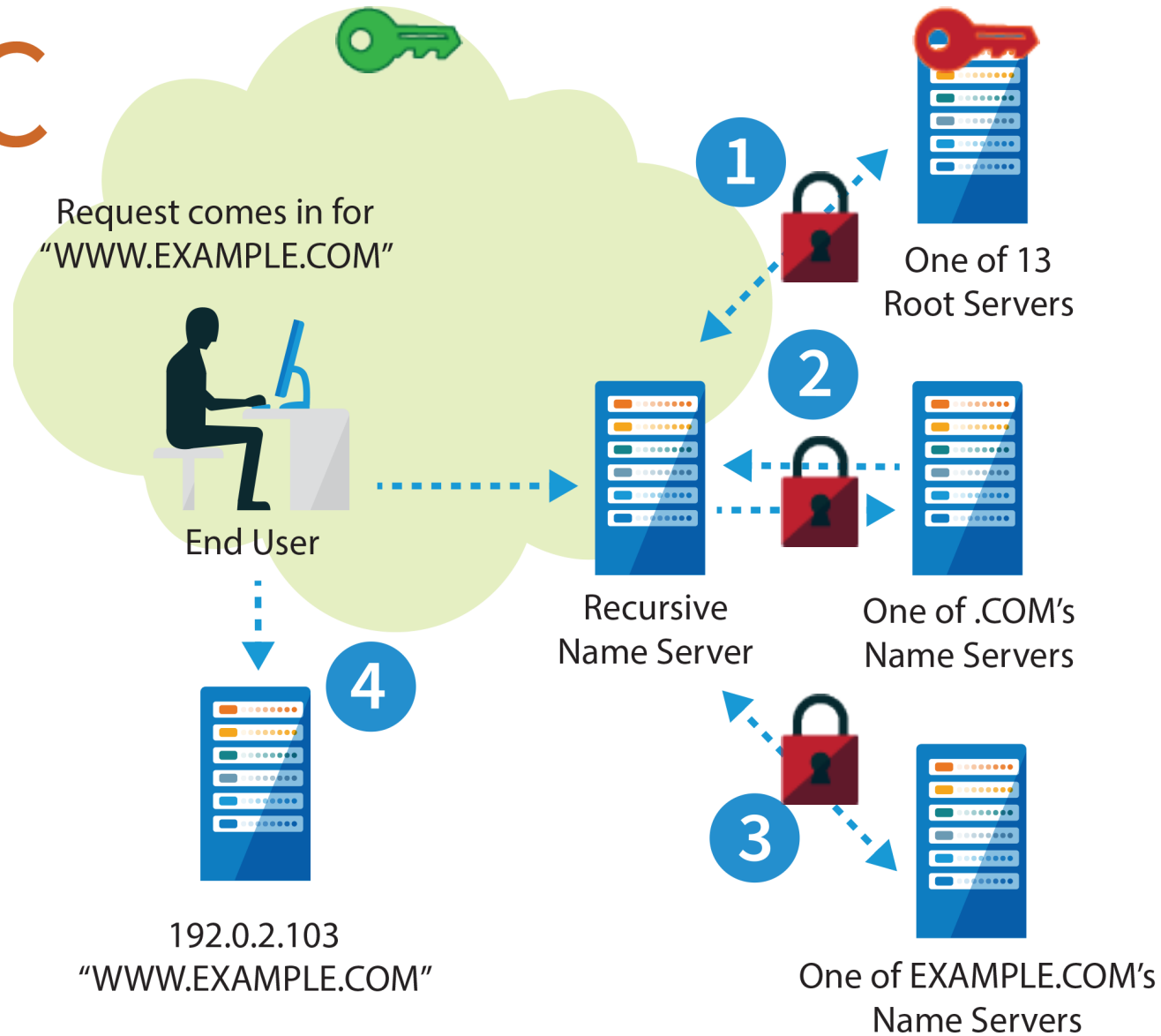


How DNS Resolution works?

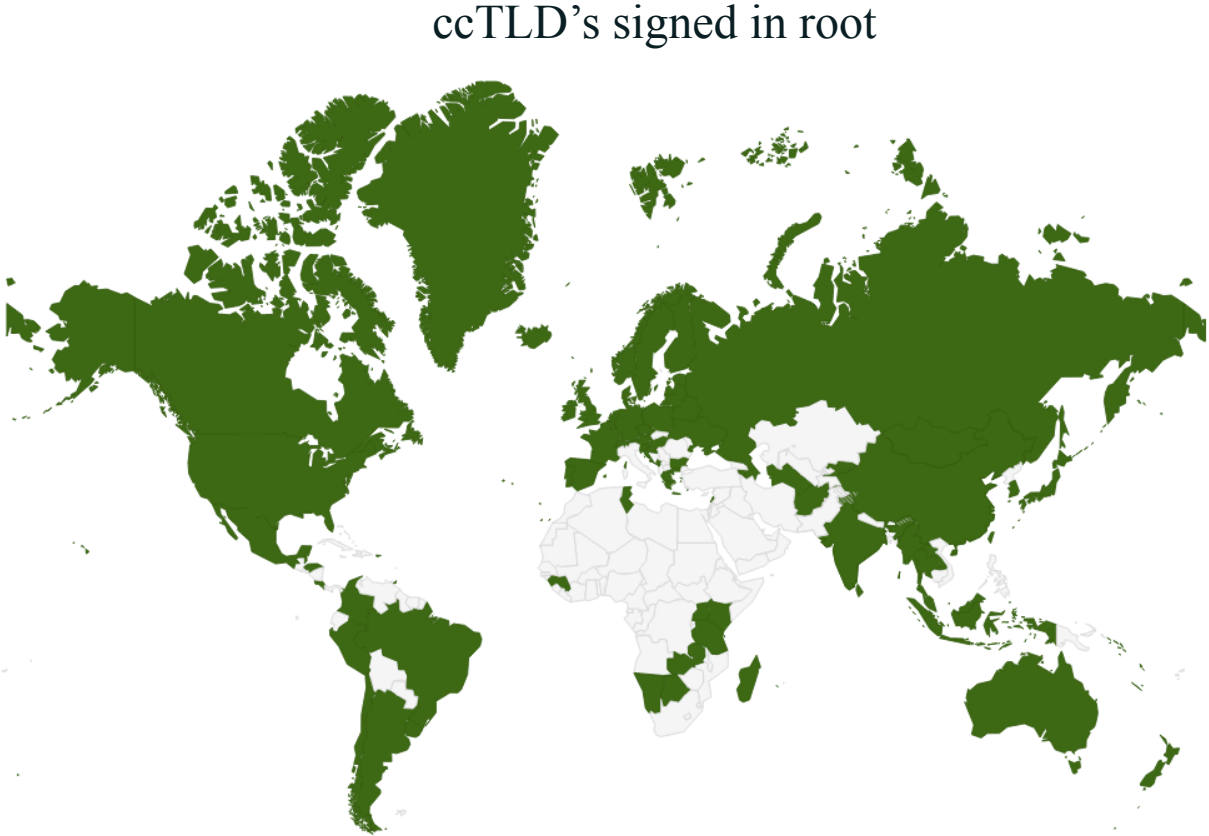
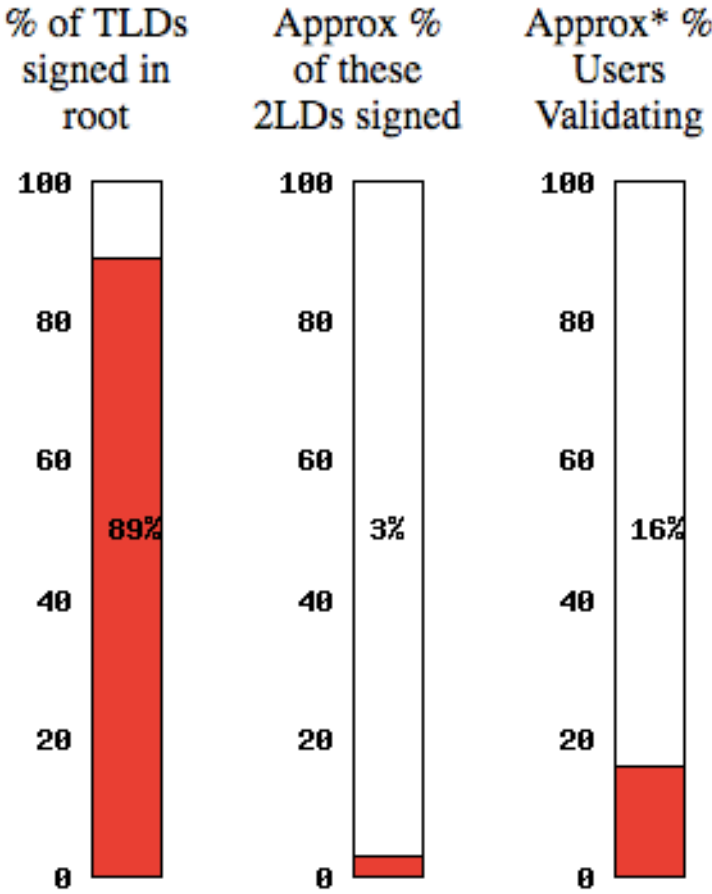


DNS Resolution – Secure

DNSSEC



DNSSEC Deployment

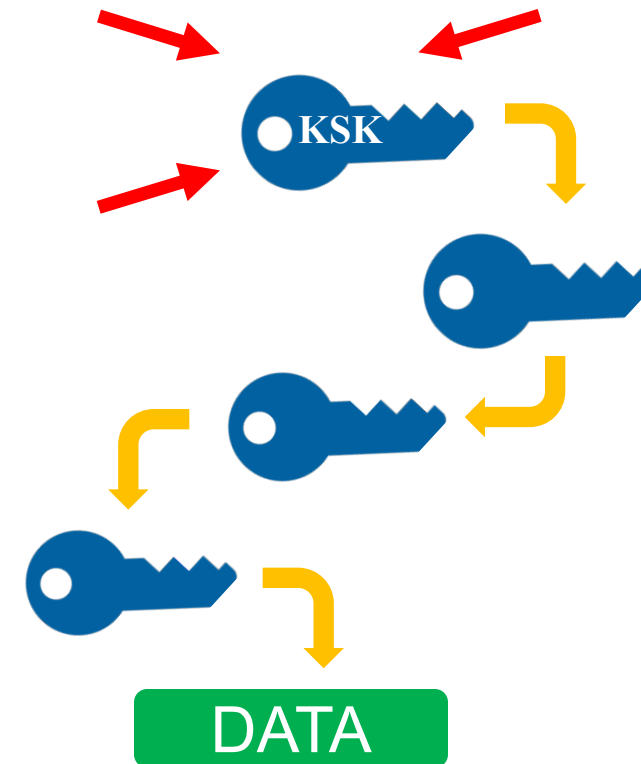


Currently, **750 million people**, use DNSSEC-validating resolvers

KSK Rollover: An Overview

ICANN is in the process of performing a Root Zone DNS Security Extensions (DNSSEC) Key Signing Key (KSK) rollover

- ◎ The Root Zone DNSSEC Key Signing Key “**KSK**” is the top most cryptographic key in the DNSSEC hierarchy
- ◎ The KSK is a cryptographic public-private key pair:
 - Public part: trusted starting point for DNSSEC validation
 - Private part: signs the Zone Signing Key (ZSK)
- ◎ Builds a “chain of trust” of successive keys and signatures to validate the authenticity of any DNSSEC signed data



Video about the KSK rollover:

<https://www.youtube.com/watch?v=d7H1AkC9Plw>

What Do Operators Need to Do?



Be aware whether DNSSEC is enabled in your servers



Be aware of how trust is evaluated in your operations



Test/verify your set ups



Inspect configuration files, are they (also) up to date?



If DNSSEC validation is enabled or planned in your system

- Have a plan for participating in the KSK rollover
- Know the dates, know the symptoms, solutions



Engage at ICANN



Issues discussed at ICANN impact your business

ICANN's work ranges relates to a broad range of Internet challenges, including policies on generic names that affect your network configuration and your brand or business practices online. Let your voice be heard on the issues that affect your business.



ICANN is open to everyone

You can tailor your participation to your needs. Remote participation is available in several languages at all ICANN's public meetings. Issues open for public comment are listed on our website for all stakeholders to provide input.



Take advantage of our multistakeholder model

Not only is ICANN open to everyone, everyone participates on equal footing. This makes it a unique place to interact with and learn from representatives from different sectors such as academia and government.



Thank You and Questions

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