



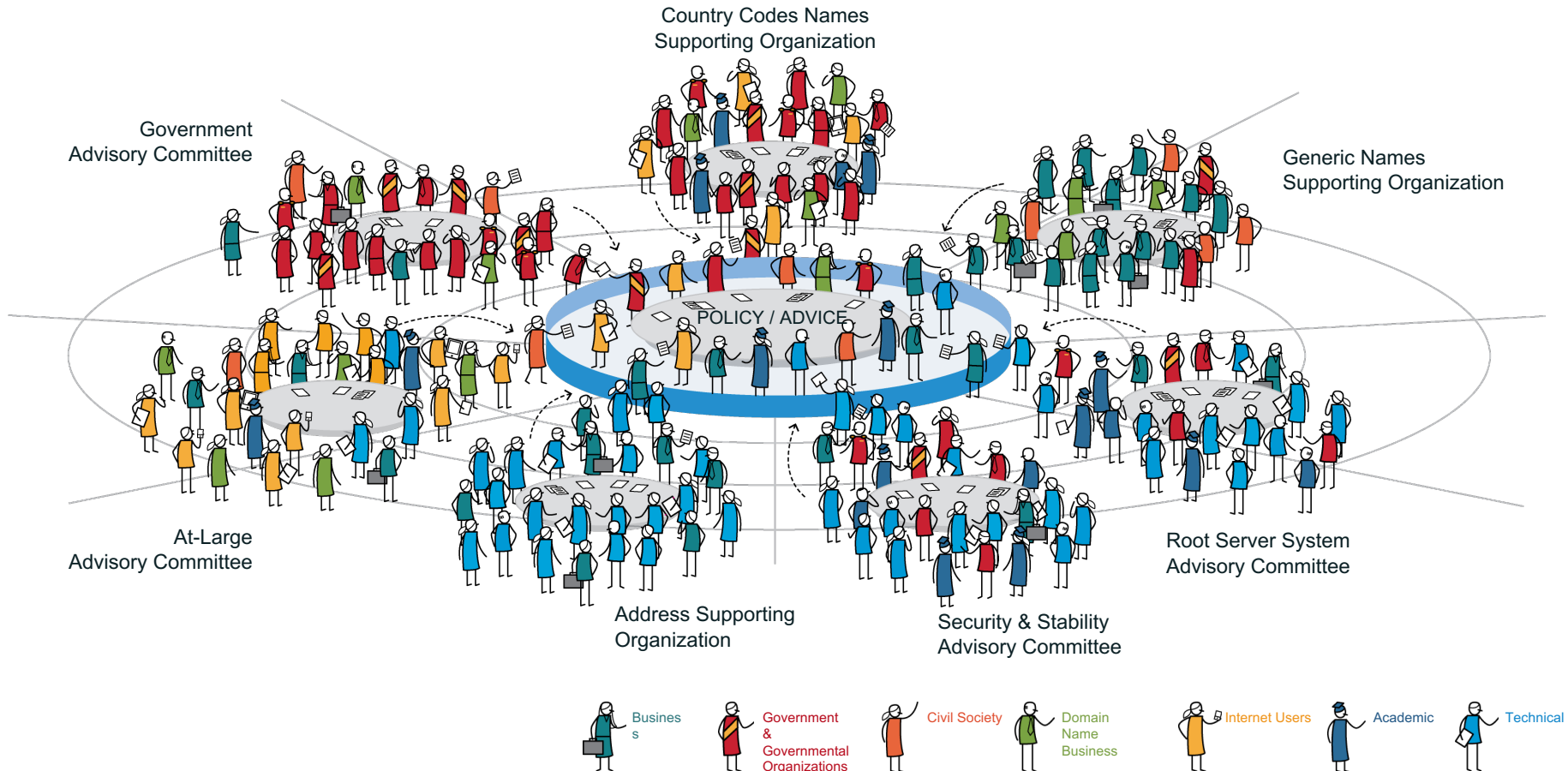
ICANN Update

Champika Wijayatunga | SANOG29 - Pakistan | Jan 2017

The ICANN Community At Work

The Bottom-Up Multistakeholder Model

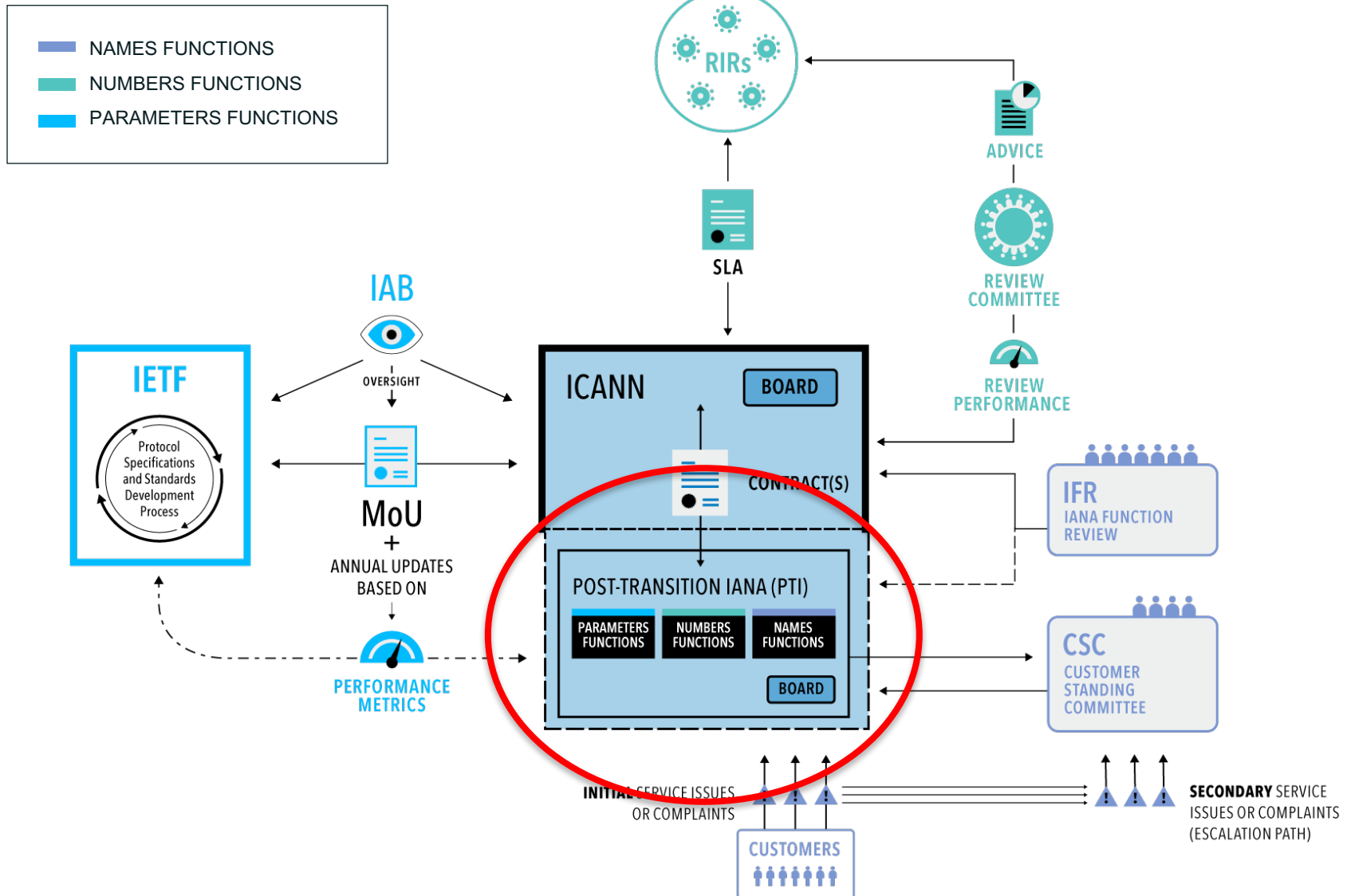
The collective efforts of the ICANN community culminate in a common shared goal:
A single, interoperable Internet supported by stable, secure and resilient unique identifier systems





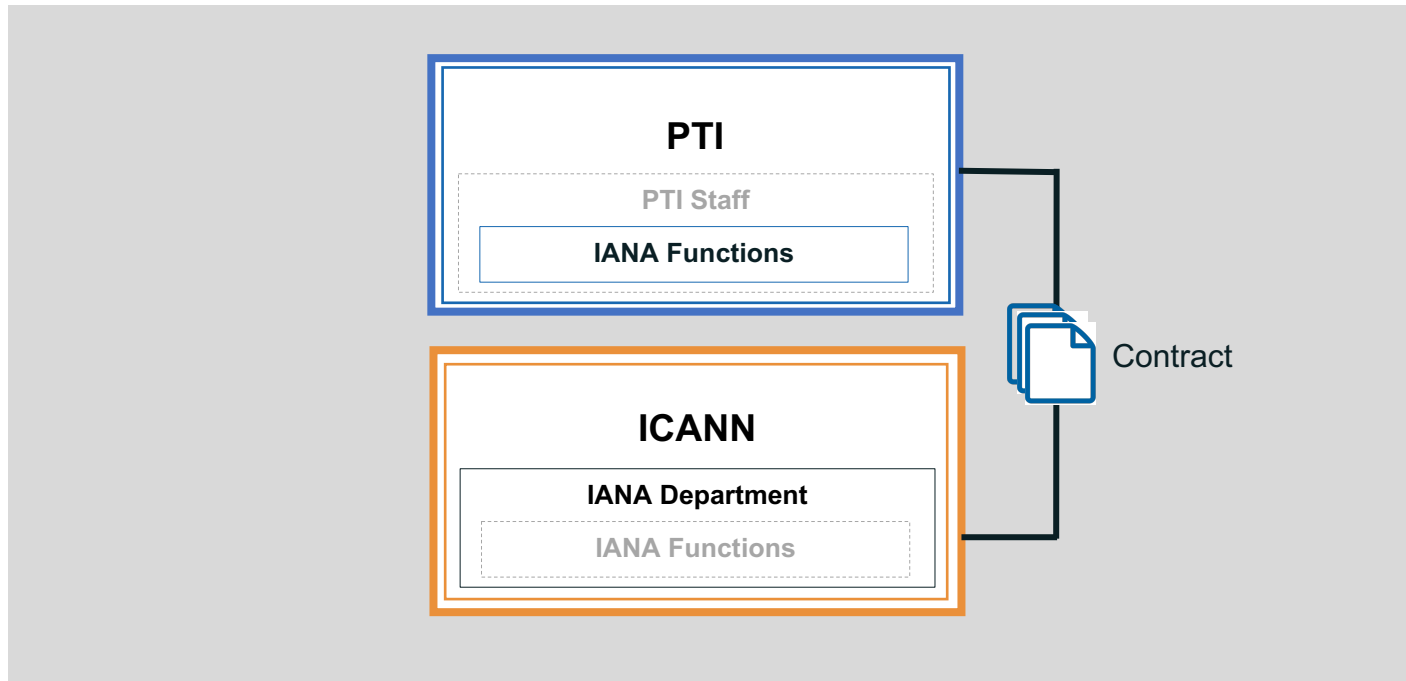
IANA Stewardship Transition and PTI

Overview



What is PTI?

Public Technical Identifiers (PTI) is an affiliate of ICANN that is responsible for performing the IANA functions and delivering the IANA Services, on behalf of ICANN.



PTI implements agreed policies and principles developed by the ICANN multistakeholder community.

What Stays the Same?

The definition of the IANA functions

Domain Names, Numbering
Resources, and Protocol Parameters

**The registries related to names,
numbers and protocol parameters**

Individuals performing the work

IANA Department staff are seconded
to PTI

**Location of the operational
information**

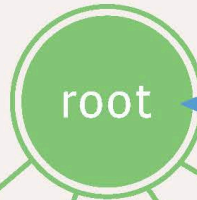
The operational reports of the IANA
services will remain on iana.org

**Methods for submitting changes or
updates to the registries**



DNS Ecosystem

DNS Root



Coordinated by ICANN

Top Level Domains

>1000
top level domains



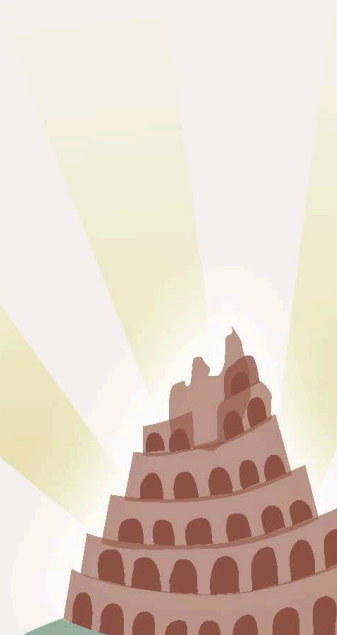
ccTLD
country-based

Second Level Domains

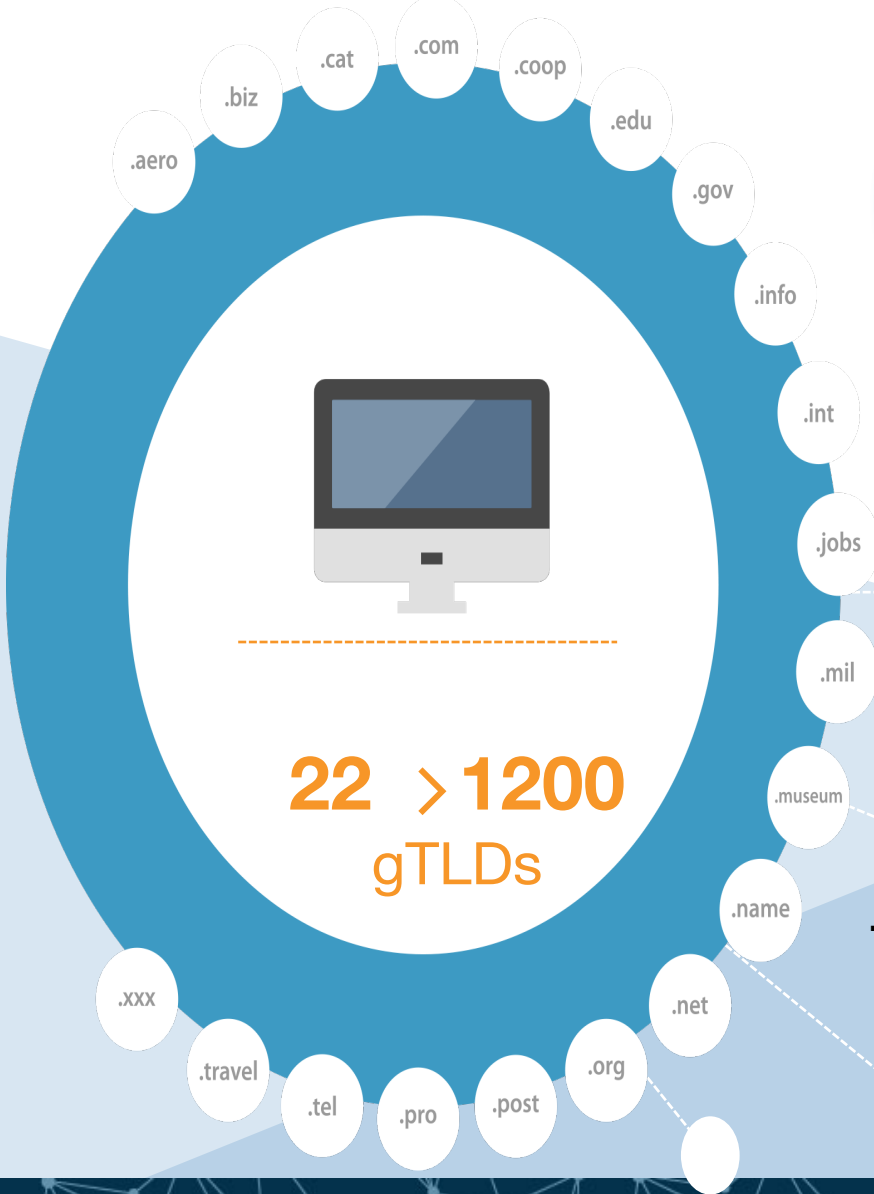
~350 million
second level domains



Third Level Domains



New gTLDs



generic Top-Level Domains (gTLDs) has expanded to over,1,200

.futbol 

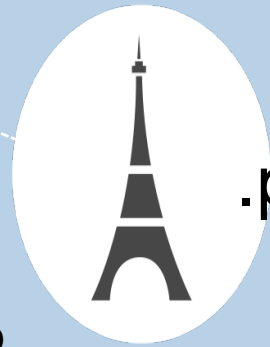
.ceo



.menu

.онлайн

.みんな



.paris

.brand

.公益 .cab

ASCII Domain Name Label

www.cafe.com



Third Level
Domain

Second Level
Domain

Top Level
Domain (TLD)



Forming ASCII Labels

Use LDH

- Letters [a-z]
- Digits [0-9]
- Hyphen (LDH)

Label length = 63

Other constraints (e.g. on hyphen)

Forming ASCII Labels

Use only Letters

- Letters [a-z]

Label length = 63

Internationalized Domain Name (IDN) Labels

ตัวอย่าง-ไทย



IDN Second
Level
Domain

IDN Top
Level
Domain



Syntax of IDN Labels

Valid U-Label: Unicode code points as constrained by IDNA2008
Valid A-Label - “xn--” followed by punycode of U-Label of length 59

Syntax of IDN Labels

Valid U-Label, further constrained by the “letter” principle for TLDs
Valid A-Label

বাংলা

Бел

الجزائر

hwyj

中国

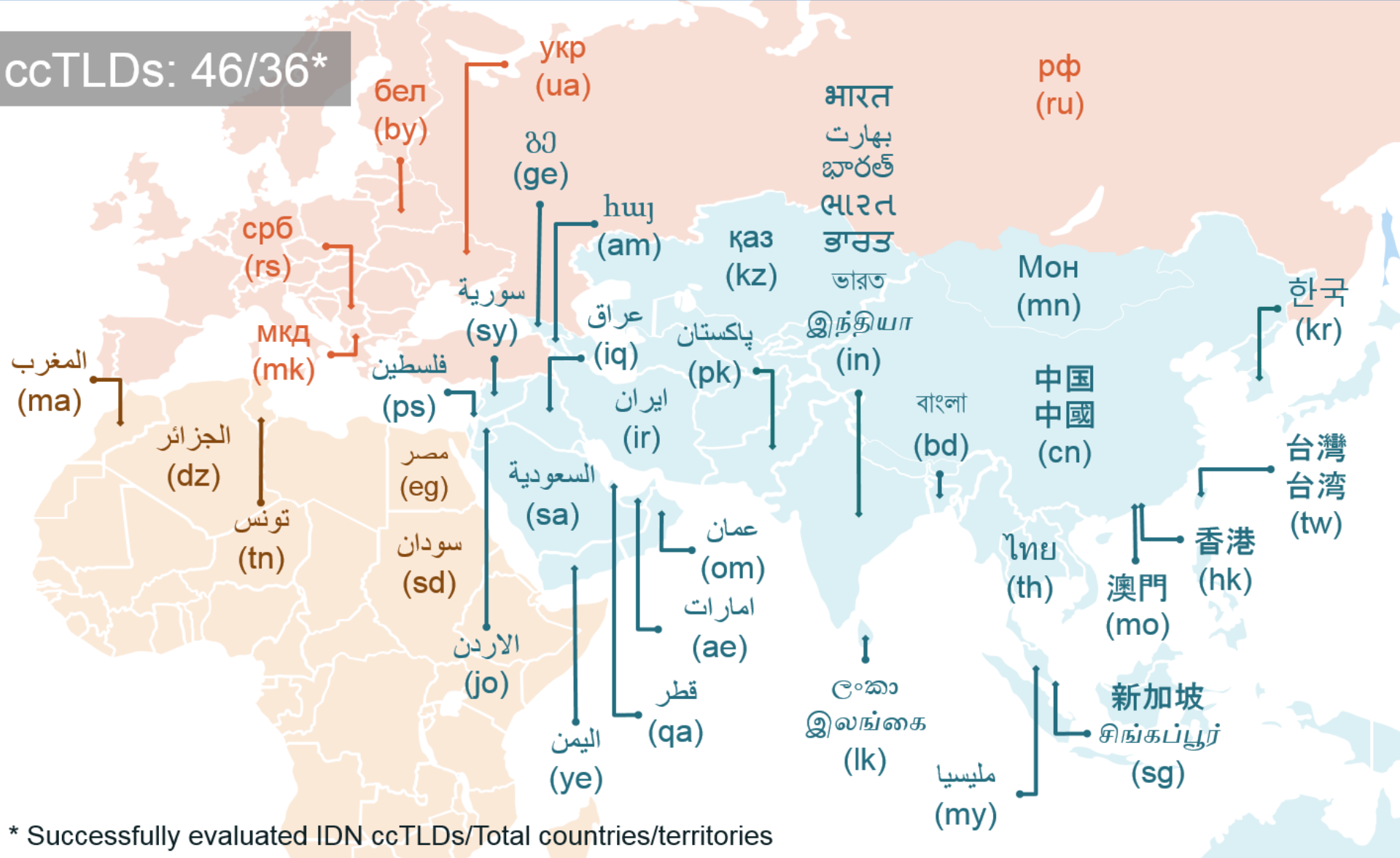
భారత్

한국

ලංකා

IDN ccTLD Fast Track Process

ccTLDs: 46/36*



* Successfully evaluated IDN ccTLDs/Total countries/territories

A world map where the continents are defined by a complex network of white nodes and connecting lines, set against a dark blue background. The nodes vary in size, and the lines represent connections between them, creating a mesh-like structure that outlines the continents of North America, South America, Europe, Africa, and Asia.

Keeping WHOIS Accurate

WHOIS INACCURACY COMPLAINT



WHAT IS WHOIS?

WHOIS is a publicly available directory containing information about registered domains such as **icann.org**, including contact information for the registrant or registrar. The WHOIS Lookup tool enables you to retrieve this information using a web browser.

WHY IS ACCURATE WHOIS DATA IMPORTANT?



Ensures domain name holders **receive renewal notices** and **important updates**



Reduces the chance of fraud – such as an unauthorized transfer or change.



Protects your domain name against suspension or deletion, which can happen if information is inaccurate or missing.

HOW DO YOU FILE A COMPLAINT?

Seven Easy Steps

- 1 Go to: <https://forms.icann.org/en/whois-inaccuracy-form>
- 2 your name your email the domain name
- 3 Don't want to disclose your name and email?
 Check the box and give a reason.
- 4 enter captcha code
- 5 Click → next page.
- 6 Select the relevant error(s) and provide comments that support your complaint.
- 7 Click **SUBMIT**

WHAT IF YOU SPOT AN ERROR IN WHOIS?

Do you hold the domain name?

Yes
Contact your registrar

No
File a WHOIS Inaccuracy Complaint

FILING TIPS

- ✔ **Respond to ICANN requests for more information** in the requested timeframe.
- ✔ **If you think the contact email address for the domain is incorrect, give evidence** that emails you sent to the email address were undeliverable.
- ✔ **Make sure your complaint is valid** – e.g., a contact telephone doesn't need to be in the same geographic location as the mailing address.

HOW DO YOU LOOKUP DATA IN WHOIS? GO TO:

<https://whois.icann.org/>

Type in your complete domain name **LOOKUP**



KEY TERMS



Domain name

Part of a URL corresponding to your unique address on the Internet, e.g., **icann.org**.



Registrant

Person or entity that holds the rights to a domain name.



Registrar

ICANN-accredited company that registers domain names.



Universal Acceptance (UA)

Universal Acceptance of TLDs

All domain names should be treated equally.

Including:

пример.рф

Internationalized
Domain Names

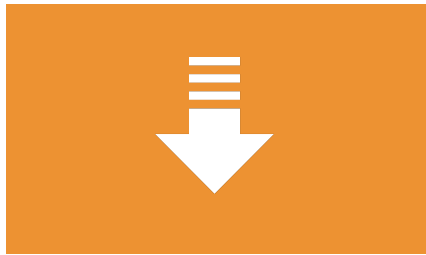
site.example

New gTLDs

名称@网站.域名

Internationalized
Email Addresses

UA - Key Principles



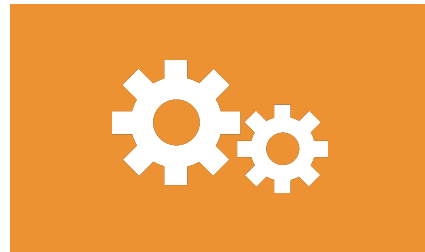
Accept



Validate



Store



Process



Display



Universal Acceptance Steering Group

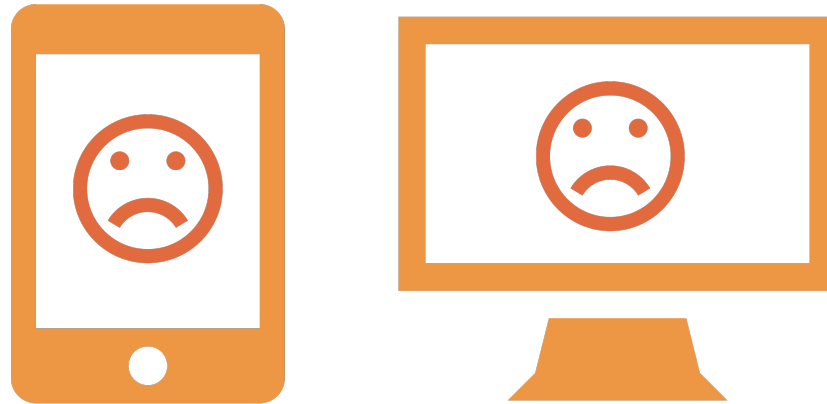
Helping software developers and website owners understand how to update their systems.



Learn more at <http://uasg.tech>

Report an Issue

Found an application or system that's not Universal Acceptance-ready?



Submit a ticket: <http://uasg.tech/global-support-centre>

A world map where the continents are defined by a complex network of white nodes and connecting lines, set against a dark blue background. The nodes vary in size, and the lines represent connections between them, creating a mesh-like structure that outlines the continents of North America, South America, Europe, Africa, and Asia.

L-Root Operation

ICANN and the L-Root



- + ICANN is the L-Root Operator
- + L-Root nodes keep Internet traffic local and resolve queries faster
- + Make it easier to isolate attacks
- + Reduce congestion on international bandwidth
- + Redundancy and load balancing with multiple instances

L-Root presence



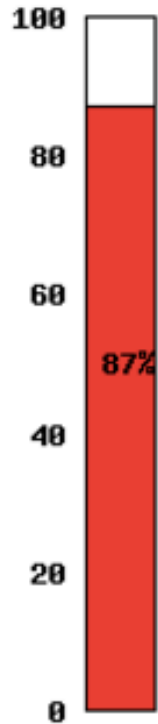
Interested in hosting an instance of L-Root? Please talk to us!

A world map where the continents are defined by a complex network of white nodes and connecting lines, set against a dark blue background. The nodes vary in size, and the lines represent connections between them, creating a mesh-like structure that outlines the major landmasses of the world.

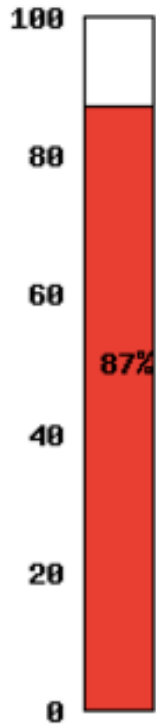
DNSSEC Deployment

DNSSEC Deployment – TLDs and Second LDs

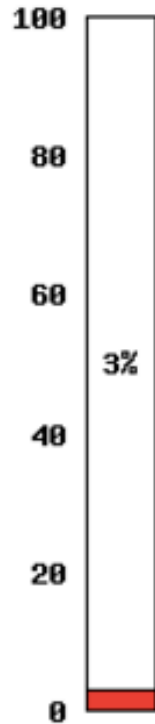
% of TLDs signed in root



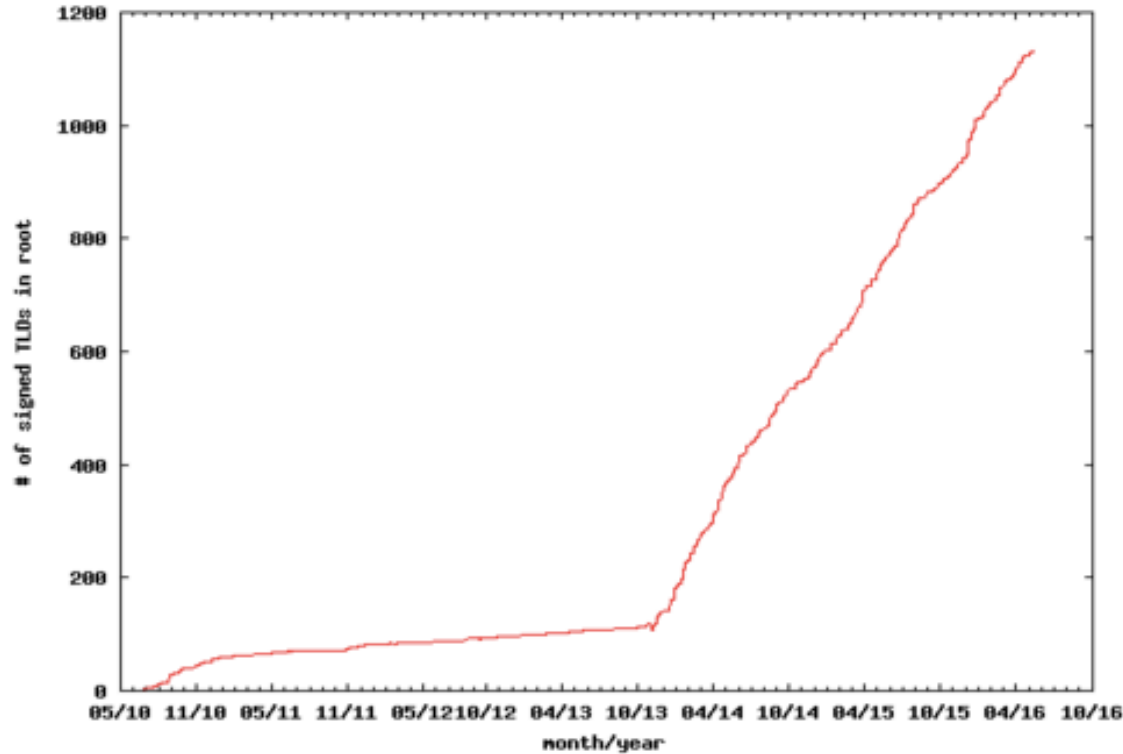
% of TLDs signed



Approx % of 2LDs signed



Trend

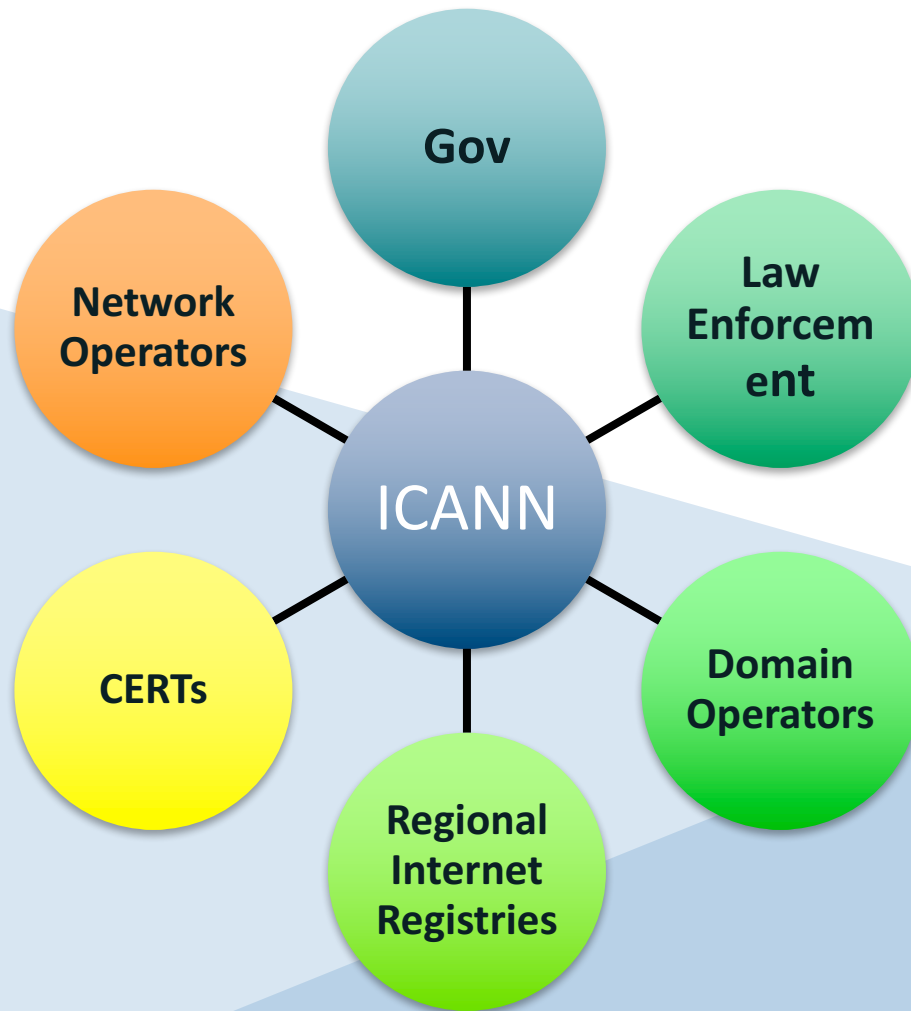


<https://rick.eng.br/dnssecstat/>



Security, Stability and Resiliency (SSR)

SSR Engagement



Threat Awareness and Response

Trust-based Collaboration

Capability Building

Identifier SSR Analytics

The background of the slide is a dark blue color. Overlaid on this is a stylized world map. The map is not a solid shape but is composed of a complex network of white dots of varying sizes connected by thin white lines. The dots and lines are more densely packed in some areas, particularly in North America and Europe, and more sparse in others, creating a digital or network-like appearance of the continents.

Next ICANN Meeting

You are welcome to...

ICANN

COMMUNITY FORUM

58

COPENHAGEN

11-16 March 2017



You can participate remotely too!

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Join us for ICANN59 | Johannesburg
Learn how to participate
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- + Program Goals
- + Awareness: Engage representatives from developing nations
- + Participation: Build capacity within ICANN community
- + Contribution: Create a broader base of knowledgeable constituents

Engage with ICANN



Thank You and Questions

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