

Introduction to Registries and Registrars

Registry Update

15 October 2012

Toronto



Industry Landscape

One World

One Internet

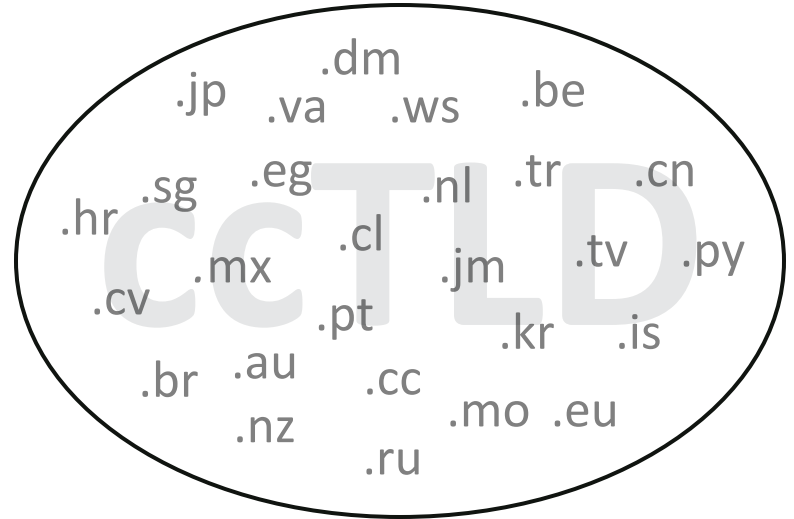


ROOT



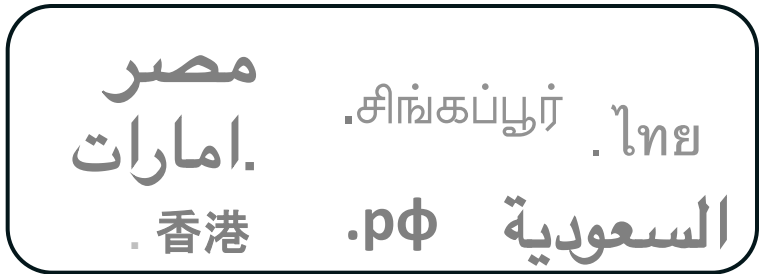
New gTLD Program

New gTLDs



Fast Track Program

IDN ccTLDs



gTLD Timeline

Pre dating ICANN
(before 1998)

.com .edu
.gov .int .mil .net
.org .arpa

.aero .biz .coop
.info .museum
.name .pro

.asia .cat .xxx
.jobs .mobi .tel
.travel .post

2004 Round



2000 Round

New gTLD Program
Policy development
Dec 2005 to Sep 2007

Public Participation and the Draft Applicant Guidebook

- October 2008 (version 1)
- May 2009 (excerpts)
- March 2009 (version 2)
- October 2009 (version 3)
- February 10 (excerpts)
- May 2010 (version 4)
- November 2010 (proposed final version)
- April 2011 Discussion Draft
- May 2011 Applicant Guidebook

Program Launch
12 January



**ICANN Board
Policy approval
Jun 2008**

**Publication
Complete
Applicant
Guidebook**

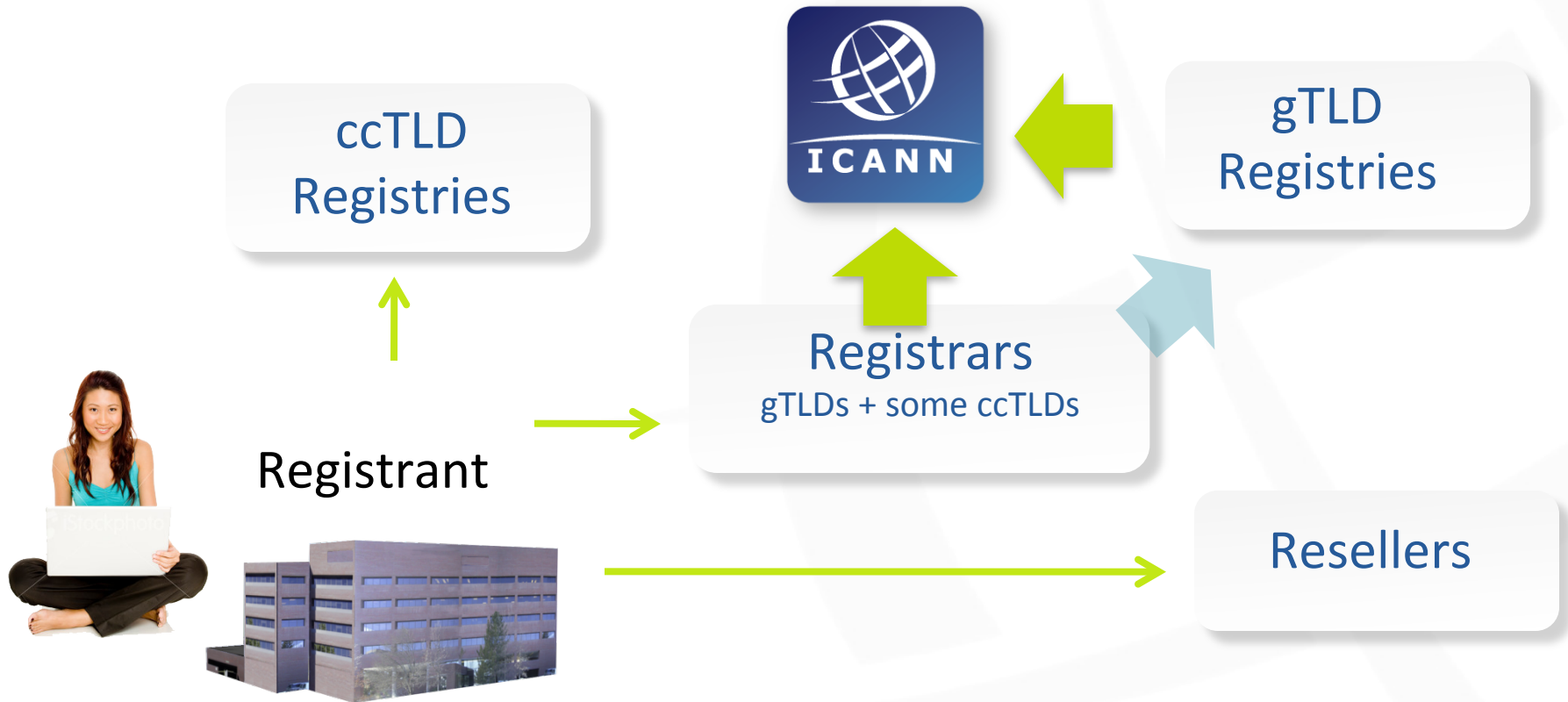
**June 13 - Reveal Date
On-going status
reporting on ICANN's
website**

New gTLD Application – A Change in the Landscape

- 1930 Applications (1409 Unique Strings)
 - As of Oct 2012 – 7 Withdrawals
- 652 *.Brand* (40% of Fortune 100 applied)
- 116 *.IDNs*
- Applicants Geographical Distribution
 - 911 from North America
 - 675 from Europe
 - 303 are from Asia-Pacific
 - 24 from Latin America and the Caribbean
 - 17 from Africa



Current Landscape



Typical Registrants

- Small Businesses
- Large Brand Owners
- Individuals (for Personal Use)
- Domainers (Investment & Traffic Monetization Businesses)



Registrant



Registrar Business Models

- Traditional Retail
- Reseller-Focused
- Low Cost / Limited Service
- Brand Protection
- Niche Markets
- Single TLD
- Private

Resellers

- Web Developers
- Web Hosts
- ISPs
- Domain Name Retailers (avoiding overhead of ICANN accreditation)
- Almost Anyone

Role of Reseller

- Click-Through Affiliates
 - no/minimal customer relationship with registrant
- Turn-Key
 - rebranding of registrar's website
 - most/all service provided by registrar
- Active Reseller
 - strong relationship with registrant
 - some RAA compliance responsibility possible
 - often tech savy, use APIs similar to EPP



About Registries

One World

One Internet



What is a Registry?

A "Registry" is the authoritative, master database of all domain names registered in each Top-Level Domain. The registry operator keeps the master database and also generates the "zone file" which allows computers to route Internet traffic to and from top-level domains anywhere in the world.



Critical Registry Operator Functions

1. DNS resolution
2. DNSSEC properly signed zone (if DNSSEC is offered by the registry)
3. Shared Registration System (SRS), usually by means of the Extensible Provisioning Protocol (EPP)
4. Registration Data Directory Services (RDDS), e.g., WHOIS provided over both port 43 and through a web based service
5. Registry Data Escrow

Day To Day Management

1. Strategy & Marketing Management
2. Transactional Management
3. Technical Issues / Management
4. Staffing
5. Legal Issues



Transactional Management

- New Registrations
- Domain Management / Modifications
- Renewals
- Domain Transfers
- Billing / Payment Systems
- Outsourcing

Technical Issues

- APIs and Channel Interfaces
- DNS Management
- Automation
- Server Provisioning
- Redundancy
- Scale

Staffing

- Customer Service
- Staff Management
- Distribution/Management



Legal Issues

- End User Terms & Conditions
- Privacy Policy
- Acceptable Use Policy
- Reseller Terms
- Dispute Resolution
- Global Compliance

More Than a Database and Software!

*Must be
designed and
managed with
security,
stability, and
robustness in
mind*

A Registry includes:

Network infrastructure – firewalls, load balancers, routers, packet shapers

- Protocol and application servers
- DNS and WHOIS servers
- Billing systems
- Monitoring systems
- Security and intrusion detection systems

Data and Infrastructure Security

What does a Registry need to protect?

- SRS Database
- WHOIS Database
- DNS Infrastructure
- Billing and Financial Systems
- Web Servers
- Customer Relationship Management Systems

Security Considerations

- Security Policy
- Security Organization
- Personnel Security Policies
- Physical and Environmental Security
- Operations and Communications
- Entitlements Management (Info access)
- System development and Maintenance (Production Support)
- Security Incident Management
- Continuity of Business (COB)
- Auditing



What to Expect in the Near Future?



Potential and Considerations

- New gTLDs – diversity, innovation!
- New Players
- Vertical Integration
- Success and failure
- TLD Acceptance issues



Emergency Back-End Registry Operator

EBERO

Organization partnered w/ ICANN
Provides critical registry services in
emergency situations
To ensure continuity of services

TLD Acceptance Issues

- What do you do if your TLD is open and available, but Internet users cannot access it?
- What if your registrants host their web site on your TLD, but their customers are unable to use it?
- What happens when your ISP “automatically” blocks access to your entire TLD?



What Can go Wrong?

- Web sites that require registrations do not accept your TLD extension
- Legal and other contract terms do not recognize your TLD extension
- Emails don't reach destinations
- Web browsers automatically reject your TLD
- Operating systems do not allow your name to be used online
- Security applications block access to your TLD from computers
- Anti-spam software marks your TLD as “not-trusted”



How to improve TLD acceptance?

- Technical work
- Public Relations work
- ICANN outreach
- Connect with ISPs, Network Service providers
- Single biggest factor: Usage of your TLD by real users
- Takes years!

Registries have a significant role in promoting acceptance of the TLD

Thank You



Questions

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