

IANA Registrant Identification Issues

Kim Davies

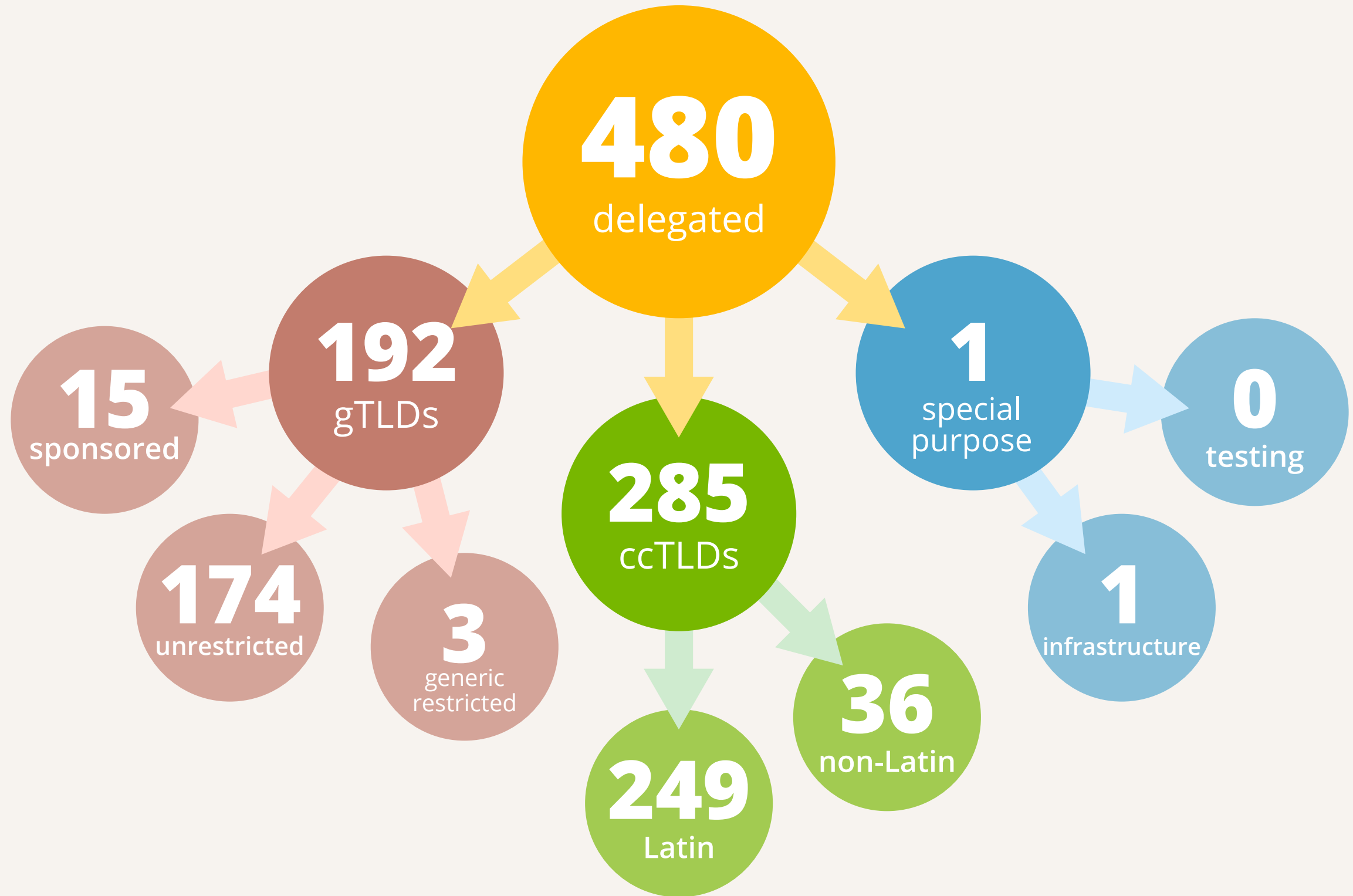
11 March 2014



Internet Corporation for
Assigned Names & Numbers

Starting assumptions

- ▶ IANA has thousands of registrants, most are for protocol registries
- ▶ For domain names, conceptually:
 - ▶ TLD managers are “registrants” in the root zone
 - ▶ .INT registrants



Data model

- ▶ Domains have a 3-contact model
 - ▶ “Sponsoring organisation”, i.e. registrant entity
 - ▶ “Administrative contact”
 - ▶ “Technical contact”
- ▶ AC and TC can now have a “private email” which is different from the published email in the WHOIS for authorization purposes

```
$ whois -h whois.iana.org se
% IANA WHOIS server
% for more information on IANA, visit http://www.iana.org
% This query returned 1 object
```

```
domain:          SE

organisation:    The Internet Infrastructure Foundation
address:         Box 7399
address:         Stockholm SE-103 91
address:         Sweden

contact:         administrative
name:            SE Administrative Contact
organisation:    The Internet Infrastructure Foundation
address:         Box 7399
address:         Stockholm SE-103 91
address:         Sweden
phone:           +46 8 452 35 00
fax-no:          +46 8 452 35 02
e-mail:          noc@iis.se

contact:         technical
name:            SE Technical Contact
organisation:    The Internet Infrastructure Foundation
address:         Box 7399
address:         Stockholm SE-103 91
address:         Sweden
phone:           +46 8 452 35 00
fax-no:          +46 8 452 35 02
e-mail:          hostmaster@iis.se
```

Normal operations

- ▶ Administrative Contact and Technical Contact must explicitly consent to any changes
- ▶ Sponsoring Organisation can replace Administrative and Technical Contact
- ▶ Technical changes must mirror changes already made to the TLD zone, implies control
 - ▶ Wholesale changes (all NS to another party) given additional scrutiny — usually defacto consider it a redelegation unless proven otherwise
- ▶ Number of changes sufficiently small we can monitor them all by hand.

Initial identification

- ▶ During delegation/redelegation of TLD, required to submit notarized extracts of company records/official registrations
- ▶ Often identify of applicant is endorsed by entities such as governmental ministers
- ▶ Take care to ensure we have a record of the specific legal entity with which we are assigning responsibility to.

Problems we see

- ▶ SO often was never a formal legal entity
 - ▶ ICANN process is more rigorous now
- ▶ Old records often non existent
- ▶ SO no longer legally exists
 - ▶ Difficult to find out true situation due to jurisdictional complexity
- ▶ Often this is deliberate(!)
- ▶ Increased use of roles makes it more difficult to know who can authorize

New methods of authentication

- ▶ Added web-based access (RZMS) with un/pw in 2011.
- ▶ Second factors for authentication under consideration
 - ▶ RZMS supports it, credential management is the problem.
- ▶ Opt-in to removing anonymous submission?
 - ▶ Current model assumes authentication comes from explicit confirmations
 - ▶ How do you do this without prejudicing redelegation requests?

Problems with clamping down

- ▶ Lost credentials
- ▶ Staff rotation
- ▶ Challenge is that volume of transaction is so low (<1/yr) it is very likely credentials will be lost.

Future

- ▶ Rethink contact model
 - ▶ Completely split the published WHOIS contacts and the authorizing contacts
- ▶ Data hygiene
 - ▶ Would love to tidy up the database, normalise data. Mostly the IANA lists provided data “as-is”.
 - ▶ Potential sensitivity — start with regular reminders like ICANN’s WHOIS notices
- ▶ Alternative opt-in authentication models
 - ▶ Lost credential recovery is the key issue to solve