



The Public Suffix List

ccTLD Tech Day

*Presented by Jothan Frakes
Friend to the ccTLD community &
Volunteer, Mozilla Foundation*

ICANN 48, Buenos Aires, Argentina



The Public Suffix List

*[Developer] Community-Driven
Universal Acceptance*

The Public Suffix List (“PSL”)



<http://publicsuffix.org>

What Is it?

- PSL is a list of all known “public suffixes”
 - Hosted by Mozilla Foundation,
 - Maintained by volunteers from developer community
 - Factors in all levels under which Internet users can register or obtain delegations.
 - Some examples of public suffixes are “.com”, “.co.uk” and “pvt.k12.wy.us” where the IANA list would have “.com”, “.uk” and “.us”.
 - Complimentary to IANA list of TLDs. Adds depth/detail to the IANA list of TLDs below first level.
 - Designed for browser ‘cookies’ initially, became more widely used



The Public Suffix List ("PSL")



IANA List

(<http://data.iana.org/TLD/tlds-alpha-by-domain.txt>)

...
AF
AG
AI
AL
AM
AN
...

Public Suffix List

(<http://publicsuffix.org>)

...
// af : <http://www.nic.af/help.jsp>
af
gov.af
com.af
org.af
net.af
edu.af
// ag : <http://www.nic.ag/prices.htm>
ag
com.ag
org.ag
net.ag
co.ag
nom.ag
// ai : <http://nic.com.ai/>
ai
off.ai
com.ai
net.ai
org.ai
// al : http://www.ert.gov.al/ert_alb/faq_det.html?Id=31
al
com.al
edu.al
gov.al
mil.al
net.al
org.al
// am : <http://en.wikipedia.org/wiki/.am>
am
// an : http://www.una.an/an_domreg/default.asp
an
com.an
net.an
org.an
edu.an
...

The Public Suffix List (“PSL”)



Where did it come from?

- **Designed to aid browsers**
 - *Founded in 2007 by Jo Hermans*
- **Practical application rapidly grew its use**
 - *Now maintained with Mozilla, by community and core group of volunteers*

The Public Suffix List ("PSL")



What does it do?

It allows for validation of the rightmost elements as TLDs underneath a domain name.

It allows browsers to, for example:

- Avoid privacy-damaging "super cookies" being set for high-level domain name suffixes
- Highlight the most important part of a domain name in the user interface
- Accurately sort history entries by site

The Public Suffix List ("PSL")



Where is it primarily used?

It used by (at least):

Browsers: *Firefox, Chrome, Opera, others;*

Where is it also used?

Programming Languages:

*Google's Java libraries; regdom-libs for C, Perl, and PHP;
Nokia QT, Ruby on Rails, JavaScript - Greasemonkey, many
others.*

Other Software and Services:

**Operating Systems – Hosting Companies – Statistics
Providers – Anti-Spam – Security Services –
Certification Providers – CRM Systems – Law
Enforcement Agencies – Form Validation
+ Many, Many More**

One Effort, Big Reach



- ***HUGE Benefit: Update in one place, cascade updates many***
 - Saves you time
- **Fast means to ensure up-to-date information on your TLD is in use**
 - Many consumers of PSL are real-time, but of the few that simply incorporate the list most have a self-updating method.

Why is this guy presenting?



- Development Community volunteers are developers and not typically at ICANN
- The maintainers want to ensure the list is current, but defer to the NIC wherever possible for validation
- Little connection between TLD operators and developer community volunteers
 - *Where possible, one of the volunteers does validation outreach, but often this gets no response back from IANA listed email*
 - *This could mean the PSL listing is accurate, or it could mean the NIC didn't see the message (spam filter?)*
 - *Better that there is some confirmation, even validating that the entry is accurate*
- I am here to encourage and inform TLDs about the benefits of keeping their PSL listing aligned with NIC SLDs or Stubs for security and universal acceptance.

The Public Suffix List (“PSL”)



How to view the PSL:

You can view it at <http://publicsuffix.org/list/> (click the link that says ‘See the list’).

How to update or add an IANA listed TLD or sub-delegation registry?

*To make amendments to the list, please visit this site:
<http://publicsuffix.org/submit/>*

Note: Requests from community not originated by NIC – attempts are made to contact NIC support or IANA listing email address.

*All Requests from go through a distributed approval process
(2x approvers, approver may not be submitter) before implementation*

The Public Suffix List (“PSL”)



Please review and add or update your entry

- **Requirements:**

- *Request must come from Registry/Authorized Party*
- *Rightmost string must be IANA Listed*
- *Subdomain Registries are allowed to request listing*
- *Pre-Delegation Exceptions to IANA listed rule:*
 - **ccTLD IDN Fast-Track TLDs that have passed String Evaluation phase**
 - (i.e. are listed on “[IDN ccTLD Fast Track String Evaluation Completion](#)”)
 - **New gTLDs that have contract announcement notice published by ICANN**
 - (i.e. are listed via “<http://mm.icann.org/pipermail/gtldnotification/>”)

The Public Suffix List (“PSL”)



Take Away This:

As it relates to Universal Acceptance

The TLD benefits from being accurately represented in the PSL

- My Community / All Users also benefit
- Simple: One edit cascades out to many applications and developers

Public Suffix List = Good. Go update it now!



Questions?



Universal Acceptance

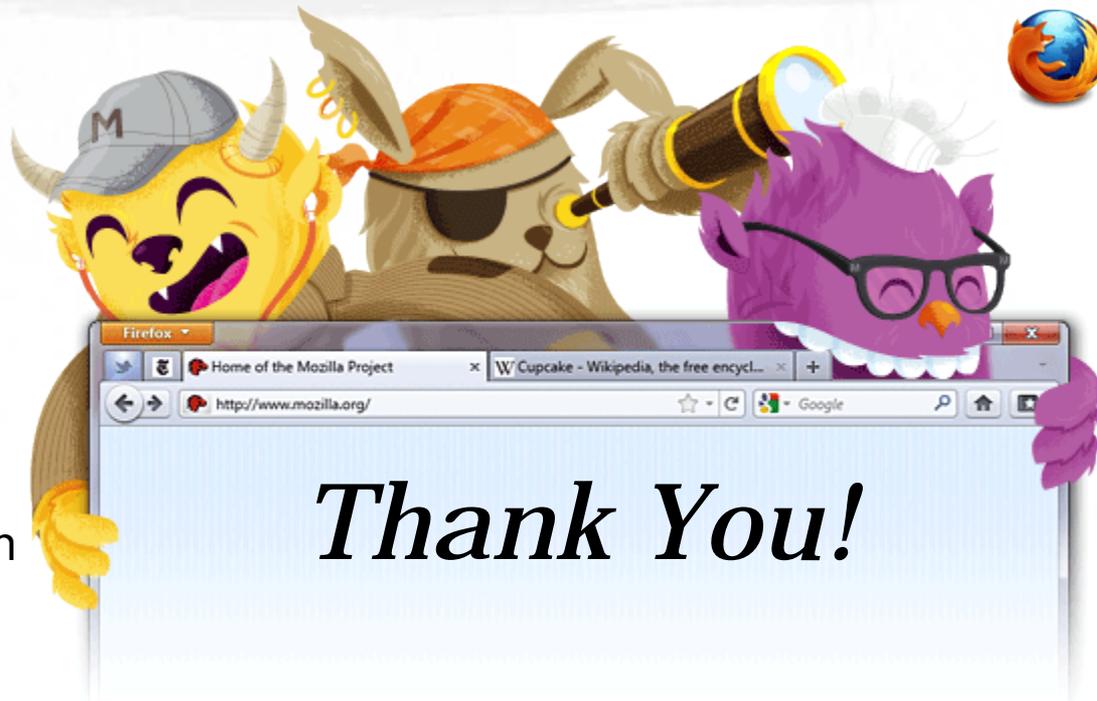


TLD administrators - you can help with Universal Acceptance and participate to ensure that your domain name functions as expected in software.

Please follow this presentation about the Public Suffix List ("PSL") or forward it to your team and take time to review your listing, updating it where it is appropriate.

PSL is a very important, volunteer-based, developer community initiative hosted by Mozilla

Thank you and recognitions



Jothan Frakes,
Volunteer, Mozilla Foundation
Web: <http://mozilla.org>
PSL: <http://publicsuffix.org>

blog: <http://blog.jothan.com>
email: jothan@gmail.com

With Special Thanks to:

Everyone in the gTLD and ccTLD community who drive and support IDN if you're not specifically mentioned. The Mozilla Foundation & Gervase Markham, Simone Carletti, Jo Hermans, Peter Kasting, Ruben Arakelyan, Pamela Greene, David Triendl, Junkshik Shin, Brett Wilson, Kevin Bourrillion, Craig Berry, Garry Boyer, Katsuhiko Momoi, Masanori Baba, Yngve Pettersen, Shawn Loveland, Nasser Kettani, Tom Mereckis, Michele Subrenard, Martin Duerst, Damon Miller, Tina Dam, James Seng, Edmon Chung, Gavin Brown, Wil Tan, Pat Kane, and others from the developer community who support and advocate IDN & of course, Kim Davies, Steve Sheng, and Naela Saras from ICANN – and Many, Many, others!