The Public Suffix List

ccTLD Tech Day
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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  
et.af  
edu.af  

// ag : http://www.nic.ag/prices.htm  
ag  
com.ag  
org.ag  
et.ag  
co.ag  
nom.ag  

// ai : http://nic.com.ai/  
ai  
off.ai  
com.ai  
net.ai  
org.ai  

al  
com.al  
edu.al  
gov.al  
mil.al  
et.al  
org.al  

am  

// an : http://www.una.an/an_domreg/default.asp  
an  
com.an  
et.an  
org.an  
edu.an  
...
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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
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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
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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:**
• **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.
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.
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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 go through a distributed approval process (2x approvers, approver may not be submitter) before implementation.
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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/”)

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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?
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

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