# PUBLIC SUFFIX LIST

# TechDay

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ICANN 64

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# PUBLIC SUFFIX LIST

**More information:**
**https://publicsuffix.org/learn/**

**View The List:**
**https://publicsuffix.org/list/public_suffix_list.dat**

**Review the entry for the TLD(s) you administer**

**Add/Modify your entry:**
**https://github.com/publicsuffix/list/wiki/Guidelines**

data.iana.org/TLD/tlds-alpha-by-domain.txt:

```
AC
AD
AE
AERO
. . .
```

```
public_suffix_list.dat

// ac : https://en.wikipedia.org/wiki/.ac
ac
com.ac
edu.ac
gov.ac
net.ac
mil.ac
org.ac

// ad : https://en.wikipedia.org/wiki/.ad
ad
nom.ad

// ae : https://en.wikipedia.org/wiki/.ae
// see also: "Domain Name Eligibility Policy" at http://www.aeda.ae/eng/aepolicy.php
ae
co.ae
net.ae
org.ae
sch.ae
ac.ae
gov.ae
mil.ae

. . .
```

**More DEPTH
and DETAIL
per TLD
entry, but was
difficult to compile**

**harder still to keep
up with all the
updates...**

Uses of the PSL
The volunteers, over the past more than decade, have documented some of the known uses of the list. If developers are using it for something else, they are encouraged to tell the project volunteers, as it helps to assess the potential impact of changes. For that, the mailing list psl-discuss exists, where the community considers issues related to the maintenance, format and semantics of the list. (Note: please do not use the mailing list to request additions to the PSL's data. This on later slide)

KNOWN APPLICATIONS AND USES OF THE PSL

FIREFOX
Restricting cookie setting
Restricting the setting of the document.domain property
Sorting in the download manager
Sorting in the cookie manager
Searching in history
Domain highlighting in the URL bar

In the future it may be used for, for example, restricting DOM Storage allowances on a per-domain basis.

CHROMIUM/GOOGLE
CHROME / SAFARI
(pre-processing, DAFSA builder, parser)
Restricting cookie setting
Determining whether entered text is a search or a website URL
Determining whether wildcard subdomains are
allowed in Origin Trial tokens

OPERA
Restricting cookie setting
Restricting the setting of the document.domain property

INTERNET EXPLORER
Restricting cookie setting
Domain highlighting in the URL bar
Zone determination
ActiveX opt-in list security restriction

OTHER APPS
Qt uses it to restrict cookie setting from version 4.7.2 onwards.

WhoisMind uses it to get the domain name out of inputted URLs.

Crawler-Commons is a suite of tools for building a web crawler, and it uses the PSL.

# SOFTWARE LIBRARIES THAT ARE KNOWN TO INCORPORATE THE PSL

C, Perl and PHP: regdom-libs includes libraries for working with the Public Suffix List.

C: libpsl, a fast offline PSL lookup library in C

C: Faup, a command line tool with a C library and Python bindings

C#: Nager.PublicSuffix

Elixir: publicsuffix-elixir

Erlang: publicsuffix_erlang

Go: x/net/publicsuffix

Go: tldextract

Go: publicsuffix-go

Haskell: publicsuffix-haskell

Java: regdom-libs has a Java port too

Java: Guava - Google's core Java libraries - has a PSL-using class

Java: Java API for the Public Suffix List

JavaScript: publicsuffixlist.js

JavaScript: tld.js

TypeScript: tldts

Lua: lua-psl

.NET: Louw.PublicSuffix.

Objective-C: KKDomain

Perl: Domain::PublicSuffix

PHP: php-domain-parser

PHP: TLDExtract

Python: publicsuffix

Python: publicsuffixlist

Python: dnspy - claims to be more flexible.

Ruby: publicsuffix-ruby gem

Rust: publicsuffix

Swift: Dashlane /SwiftDomainParser

This is not exhaustive, and there's also a long list of libraries in various languages in the comments on Stack Overflow, so view this (with hyperlinks) at https://publicsuffix.org/learn/

STANDARDS

DMARC
CAB Forum Baseline Requirements. The Baseline Requirements ban the issuance of wildcard certs where the wildcard is the next label immediately after a registry-controlled label, and suggests using the "ICANN DOMAINS" section of the Public Suffix List for determining what's registry-controlled.
HTML 5 (document.domain)

Other
Let's Encrypt uses it for rate limiting applications to their CA. If you just need an exception from their rate limits, please do not request a change to the list, but instead use their form, linked from their documentation. This is a faster way to achieve what you want.

PSL also has undergone a review by the SSAC, SSAC/70

The Public Suffix List extends the elegance of program interaction with Domain Names, which furthers the objectives of  Universal Acceptance

**Streamlined Process of Add / Modify, w Validation:**

**READ / FOLLOW GUIDELINES!**

1  Clone publicsuffix/list on GitHub

2  Make your pull request of patch, get id#

3  Add corresponding TXT record for host '_psl' with pull request id# in zone (validation step)

4  Submit Patch

5  Test for Errors

6  If All checks have passed... Merge the Pull Request

7  Watch for email / private follow-ups from the _volunteers_, if needed.  Patience sometimes required.

# QUESTIONS?

# https://publicsuffix.org
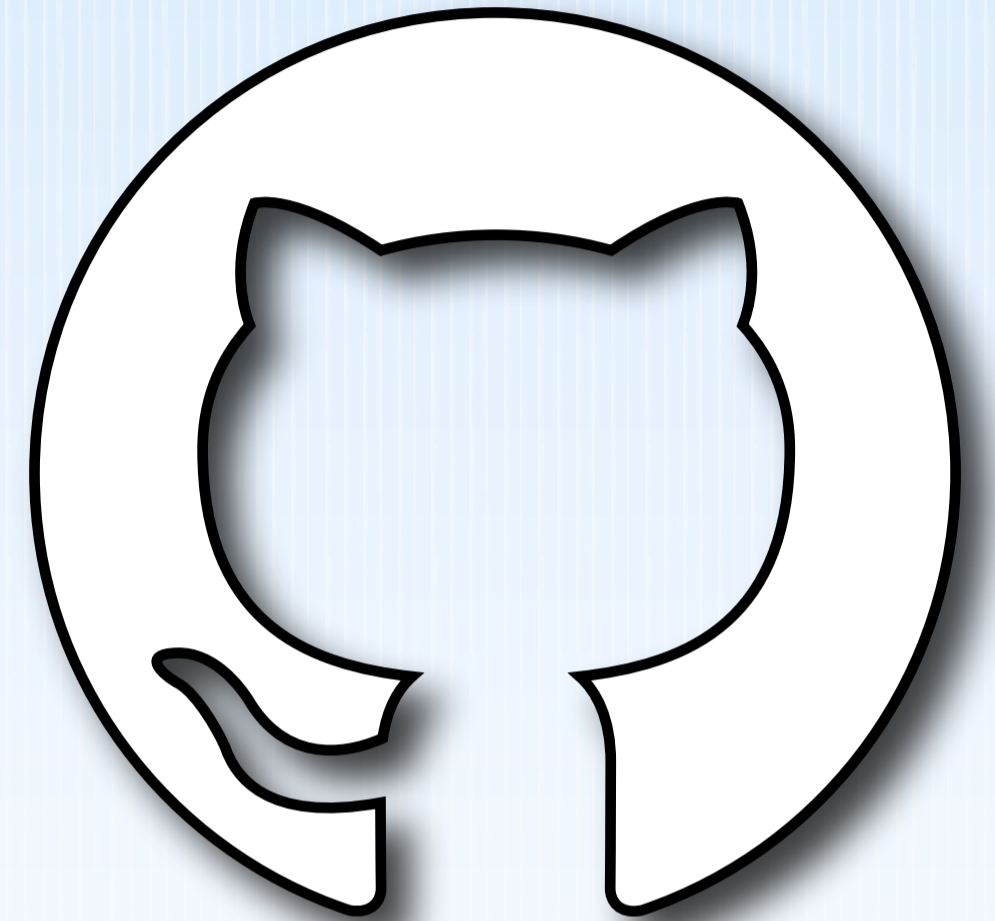
**All of the information from these slides is available at this website**

# ARIGATO!

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