

Universal Acceptance of all TLDs

Working session
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Agenda:

- Introduction
- Overview of the Project
- Speakers and Presentations
- Questions and Discussion



Universal Acceptance of all TLDs

On-going effort at ICANN with the goal to raise awareness about the diversity of the domains (gTLDs and ccTLDs, ASCII and IDN):

<http://www.icann.org/en/resources/tld-acceptance>

Covers acceptability issues due to certain constraints as implemented in software

Does not cover policy aspects of what domains should be allowed or restricted



Why it is important

The DNS is evolving and continues to grow - hundreds of new TLDs are expected to be added in the near future

How to minimize the compatibility issues in software on the Internet and ensure that

- Users' emails are working
- URLs are recognized as such in browsers



Acceptability issues - Examples

Permanent Home Address Line 1*:

Permanent Home Address Line 2:

City*:

Zip Code*: -

State*:

SSN*: - -

Date of Birth*: / / (MM/DD/YYYY)

Mother's Maiden Name*:

E-mail Address: @ .

Note: You must be a U.S. resident. No P.O. boxes. You must be 18 or older, 19 in AL. be cons

Domain List:

- aero
- biz
- com
- coop
- edu
- gov
- info
- mil
- museum
- name
- net
- org
- pro
- us



Example of Hard-Coded List

```
472 "tz", // Tanzania
473 "ua", // Ukraine
474 "ug", // Uganda
475 "uk", // United Kingdom
476 "um", // United States Minor Outlying Islands
477 "us", // United States of America
478 "uy", // Uruguay
479 "uz", // Uzbekistan
480 "va", // Vatican City St
481 "vc", // Saint Vincent a
482 "ve", // Venezuela
483 "vg", // British Virgin
484 "vi", // U.S. Virgin Isl
485 "vn", // Vietnam
486 "vu", // Vanuatu
487 "wf", // Wallis and Futu
488 "ws", // Samoa (formerly
489 "ye", // Yemen
490 "yt", // Mayotte
491 "yu", // Serbia and Mont
492 "za", // South Africa
```

```
$_cctld = array(
    'ac',
    'ad','ae','af','ag',
    'ai','al','am','an',
    'ao','aq','ar','as',
    'at','au','aw','ax',
    'az','ba','bb','bd',
    'be','bf','bg','bh',
    'bi','bj','bm','bn',
    'bo','br','bs','bt',
    'bu','bv','bw','by',
    'bz','ca','cc','cd',
    'cf','cg','ch','ci',
    'ck','cl','cm','cn',
    'co','cr','cs','cu',
    'cv','cy','cz',
    'de','dk','dm',
```

```
$_gtld = array(
    'aero',
    'biz',
    'cat',
    'com',
    'coop',
    'edu',
    'gov',
    'info',
    'int',
    'jobs',
    'mil',
    'mobi',
    'museum',
    'name',
    'net',
    'org',
    'pro',
    'travel',
    'asia',
    'post',
    'tel',
    'geo',
)
```



Czechoslovakia?

.geo

Example of String Length Check

But you can do much more with regular expressions. In a text editor like [EditPad Pro](#) or a specialized text processing tool like [PowerGREP](#), you could use the regular expression `\b[A-Z0-9._%+-]+@[A-Z0-9.-]+\.[A-Z]{2,4}\b` to search for an email address. Any email address, to be exact. A very similar regular expression (replace the first `\b` with `^` and the last one with `$`) can be used to

All TLDs must be 2-4 ASCII letters (A-Z)



Examples of Causes of some Acceptability issues

- Improper logic in software for checking valid domains
- Lack of IDNA support
- Old software that is not yet upgraded



Activities to date...

- Created discussion forum and dedicated webpage: <http://www.icann.org/en/resources/tld-acceptance>
- Posted proof-of-concept TLD verification tool at: <https://github.com/icann>
- Consultations with ICANN stakeholders
- Registries and Registrars activities
- JIG WG
- Technical recommendations
- Outreach campaign



What can you do?

- Check your software – do all your applications properly support all domains?
- Inform and educate software developers and others
- Contact us at: tld-acceptance@icann.org



What we are working on now

- Outreach campaign
- Improving TLD verification libraries
- Informational and educational materials
- Your suggestions?



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Thank You



Questions

