TLD Universal Acceptance Initiative
About these slides...

• First discussion of ICANN’s proposed roadmap
• Drafted document will be available soon
• Public input will be sought in June and July
• A session-in-preparation at ICANN50 (London) will be considered part of the public consultation
Agenda

• Introduction & Background
• Scope of the Initiative
• Problems, Examples, Etc.
• Network of Interests
• High-level Roadmap
Introduction & Background
What is the Issue?

If names in a TLD aren’t useable, the TLD isn’t useable.
What are Problems?

• Name Ownership and Operation
• Web Browsing
• E-mail Delivery
• Content Search and Examination
• User Interface
• Identifier security
Activities to Date
ICANN related efforts

• TLD Universal Acceptance
  o An effort to remove obstacles to the use of newly created TLDs

• IDN TLD Universal Acceptance
  o An effort to enable non-Latin script TLDs

• Joint IDN Group (JIG) Final Report on Universal Acceptance of IDN TLDs
  o ICANN stakeholder groups combined statement
Other Studies/Activities

• EURid’s “World Report on IDN Deployment”
• APTLD’s “Addressing the issue of Universal Acceptance of IDN TLDs”
• A topic of DNA’s Technical Committee
• Fairwinds Partners TLD Compatibility WG
Where (some) Solutions Lie

- GNU’s libidn (open source)

- Microsoft’s “Handling Internationalized Domain Names”

- Twitter’s “twitter text”
  - [https://dev.twitter.com/docs/tco-url-wrapper/how-twitter-wrap-urls](https://dev.twitter.com/docs/tco-url-wrapper/how-twitter-wrap-urls)
Scope of the Initiative
Universal Acceptance

• Combine work on
  o TLD Universal Acceptance
  o IDN TLD Universal Acceptance
  o other work such as Internationalized Email

• *If names in a TLD aren’t useable, the TLD isn’t useable*
Overlaps

- TLD Universal Acceptance
  - Any TLD, especially recent gTLDs
- IDN TLD Universal Acceptance
  - IDN TLDs, ccTLD or gTLD, all are “new”
- Non-Latin script identifiers
  - Email addresses, mailbox names
- Each are unique elements but fates are linked
Scope Limits

• The initiative addresses what can be considered “errors” or “false positive” rejections of names, including TLDs

• The initiative is not addressing administrative prohibitions on names, including TLDs
Problems, Examples, Etc.
Name Ownership and Operation

- Lifecycle of name ownership
  - Registration of name and contacts
  - Use of name (such as web, email)
  - Management of name (transferring registration)
Web Browsing

• Same Origin Policy
  o Determining relationships between names

• Treatment and Display of Scripts
  o Assumptions made about what user can read
  o Defense against “look alike” attacks
E-mail Delivery

• Configuration of mailbox name
  o Internationalized email (IETF’s RFC 6530)

• Spam rating and filtering
  o Rules for what is and what isn’t “real email.”
Content Search and Examination

- Language Assumptions
- Ranking of Results
- Malware Detection
User Interface

• Drop-down menus (for example)
  o Choice is limited

• Right-to-left and left-to-right scripts
  o As scripts mix, will they overwrite each other

• Text-to-URL conversion
  o Interpreting meaning of strings
Identifier security

- **URL**
  - Represent “things”

- **Email Addresses**
  - Used to identify people

- **Domain Validation Certificates**
  - Representing hosts
Network of Interests
Domain Name Registration

- ICANN
- Registries
- Registrars
- DNS Hosting
Protocol and Operational Standards

- IETF/IAB
- W3C
- CA/Browser Forum
Industry Forums

- TLD Registry and Registrar Associations
  - APTLD
  - CENTR
  - LACTLD
  - AFTLD
- Other Associations
  - Domain Name Association
  - Fairwinds Partners
Software/Service Producers and Vendors

- Microsoft and Apple
  - Software developer conferences
- Google
- Mozilla
- Open source
- Web-mail, web hosting
- Social media
Written Script and Language Communities

• TF-AIDN, Task Force on Arabic Script IDNs
• Seeking other languages/scripts
High-level Roadmap
What Needs to Be Done

• Define Scope
• Identify and recruit
• Create a sense of urgency
  ○ As important as IPv6 and DNSSEC
• Enabling sector: Registration
• Rest of the Internet
Roadmap Story

- Global alliance/...
  - An organized critical mass to push this forward
  - Not *needing* to be a formal task force/WG/SIG
- Steering of priorities, focus, energy
  - Encourage progress but eliminate bottlenecks
- Milestones and possibly measures
  - To motivate at all turns
Sequence of Activity

- Community buy-in, support
- Establishment of a global alliance
- Domain registration ecosystem
- Rest of the Internet
Universal Acceptance Initiative URLs

- Two ICANN resources
- A description of the TLD Universal Acceptance Initiative
- An ICANN community wiki
  - [https://community.icann.org/display/TUA/TLD+Universal+Acceptance+Home](https://community.icann.org/display/TUA/TLD+Universal+Acceptance+Home)
Social Media

https://twitter.com/ICANN

http://www.facebook.com/icannorg

http://gplus.to/icann

http://weibo.com/icannorg

http://www.linkedin.com/company/icann