Internationalized Domain Names

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IDN - Discussions this week

- Community discussions working in the ICANN model
 - At-Large, ccNSO, GAC, GNSO, constituency , etc. collaborations
 - although remaining divided, is progressing
- IDN ccTLD Fast Track Process
 - Draft required Documentation of Responsibility
 - Financial models for some level of cost-recovery
 - will provide financial details to inform process (4-6 wks)
 - IDN Tables and variants
- IDN gTLD
 - # of chars in a string, especially CJK feedback
 - technical and policy adequate solution for implementation
- IDNA Technical standards
 - must be adhered to, potential focused session in Sydney

Detailed Overview

- Meetings during the Mexico meeting
- IDNs availability and progress
- Revised IDN ccTLD Draft Implementation Plan
 - Main topics discussed this week:
 - Documentation of Responsibility
 - Financial Model
 - IDN Tables and Variants
 - Contention Prevention and Solutions
- IDN gTLDs
 - # of characters in a gTLD string
- IDN Technical Focus
 - Why technical standards are necessary
 - IDNA protocol revision status

Meetings, Mexico City

- At-Large Summit focus on IDNs
 - Particular focus on user expectation and needs in relation to functionality of IDN ccTLDs and IDN gTLDs
- GAC full day sessions on IDN ccTLD Fast Track Process
 - Particular attention: Documentation of Responsibility, financial model, and technical aspects
 - GAC communiqué recommending voluntary arrangements, and models http://gac.icann.org
- ccNSO, several sessions focused on IDN ccTLDs
 - Particular attention: Documentation of Responsibility, financial model, and technical aspects
 - ccNSO resolution recommending voluntary arrangements, and models <u>http://ccnso.icann.org</u>
- GNSO and constituency meetings focused on IDN gTLDs and IDN ccTLDs – and many more.....

IDNs so far...

- 1-6 march 2
- IDNs have existed as second level since 2003
 - under web protocol standards (under revision IETF)
 - some email clients (standard underway IETF)
- We also need IDN TLDs
 - •北京.中国; [xn--1lq90i. xn--fiqs8s]
 - IDN .test TLDs since Sept 2005 (http://idn.icann.org)

Domain Availability	ASCII domain names (a, b,,z), (o,1,,9), (-)	domainname.TLD icann.org
Today	IDN second level	실례.TLD -under various existing TLDs
Future Addition	IDN TLDs	실례. 테스트



IDN availability so far

- Per community request, ICANN is making an attempt to gather information about where IDNs are available at the second level.
- First draft of map illustrating this availability :
 - http://www.icann.org/en/maps/idntld.htm
- Please provide us with corrections and additions



IDN TLD Processes

- Implementation of Country-code IDN TLDs Fast Track
- implementation of recommended policy from IDNC WG
- review of relationship and financial model for IDN TLD operators
- review of technical requirements for IDN TLD management
- review of variant management

Country-code IDN TLDs – Long Term

- Full policy that caters for all
- Follows the full ccNSO Policy Development Process

New Generic TLDs

- New ongoing policy for new gTLDs
- Includes internationalized domains
- Focus on non-ASCII squatting & confusingly similarity solutions

Revised IDN ccTLD



Fast Track Draft Implementation Plan

- Released for public comments (until 6 April 2009)
 - Defined criteria for:
 - evidence of support or non-objection
 - DNS Stability Panel used technical review
 - ICANN contact through application process
 - Clarifications made on:
 - eligibility requirements
 - technical string req to be redefined per revision of IDNA protocol revision and IDN Guidelines
 - termination process includes contact to applicants
 - Further expertise needed on:
 - meaningfulness criteria for strings
 - Further details provided on issues, Module 7 (as follows) 8



Proposed Details on:

Documentation of Responsibility

- Standard arrangement (DoR) between prospective IDN ccTLD operators and ICANN
- Draft DoR posted for public comments, based on:
 - the existing ccTLD Framework
 - compliance with provisions for technical aspects
 - IDNA protocol
 - IDN Guidelines
 - received comment of previous Draft Impl. Plan
 - Broad variety for and against a required contract
- A separate paper on DoR specifics for public comments



Financial Model

- Received comments so far are split between
 - cost-recovery (like gTLD Program)
 - no fees or voluntary fees (like existing ccTLDs)
- Comparable activities aim at fair/equitable cost recovery
- ICANN standpoint:
 - new situation different from existing TLDs
 - requires some cost-recovery from the IDN TLD managers
- Additional details in Module 7
 - requesting feedback on fee components and level

Proposed Details on:

- IDN Tables inform users and reduce confusion
 - based on a language, script, or sets thereof
 - a registry can use more than one table
- Proposal to urge coordination across language communities in developing tables
- ICANN usage of tables at top level:
 - Variant strings are either delegated or blocked
 - Due to linguistic usage of scripts within country/territory
 - Matching current second level policies and procedures
 - RFI reply analysis shows @7 variant strings allocated
- A separate paper with details posted for comments

Preventing Contention

- Prevention of contention between
 - Fast Track requested IDN ccTLD strings
 - Existing TLD strings
 - Proposed strings in new gTLD applications
- Proposed rule:
 - A gTLD application approved by the ICANN Board & a validated IDN ccTLD string is considered "existing TLD"
 - any other later application for the same string will be denied
 - Validated = meaningfulness confirmed, technical check passed
 - if contention is identified: new gTLD application is placed on hold, the IDN ccTLD request prevails (if passing validation)
 - if both parties have government assent, both applications is placed on hold until contention is resolved between them

IDN ccTLD Fast Track Process

- looking forward

- Reaching collaboration on outstanding issues
 - DoR
 - Financial Model
 - IDN Tables and Variants Management
 - Contention Solutions
- Enabling the Finalization of the Implementation Plan
 - Board approval
 - Implementation of the process
 - Launch Fast Track Process
 - Allocate IDN ccTLDs
- Experience gained is input to the IDN ccTLD PDP

IDN gTLDs

- Part of ongoing program for new gTLDs
- Main changes relating to IDNs in the Guidebook:
 - Technical string criteria, which will continue to evolve as the protocol revision in progressing
 - # of characters, in particular for CJK community
 - While it is understood that parts of the community have expressed a need for 1 and 2-char TLD strings, it was not possible to find a sound way of implementing this need
 - Requested feedback from community to set criteria
 - Much appreciated, ideas have been received this week that will continue to be worked upon

Why technical standards are necessary

- The term "protocol" designates a technical standard
 - Core set of protocols determine Internet functionality
 - The DNS is based on one of the most fundamental protocols
- The IDNA protocol is different and it is
 - entirely external to the DNS
 - functions at the application layer
 - basic DNS operation not changed by IDN introduction
 - Experience with IDNs shows multiple application implementations
 - Due to security problems, warning users => different experience
 - Different applications different responses
 - Blog-post with more details: http://blog.icann.org/2008/11/compliance-with-idn-technicalrequirements/#comments

IDNA protocol



- Non-compliance with the IDNA protocol
 - Hurts all IDN registries, not just the non-compliant
 - Applications providers will see further security problems
 - Resulting in more inconsistency at user level
 - IDNA protocol exists but is under revision
 - Unicode version independent
 - Fixing right-to-left script problems
 - Adding characters that previously were not available
 - Such as ZWJ, ZWNJ, Esszett, Final Sigma
 - ICANN standpoint:
 - the preference is that the protocol revision is completed, however if indications show that this is not possible then we will proceed with the existing version of the protocol (potentially with additional precautions for the TLD strings to ensure future compatibility).

Thank You

http://icann.org/topics/idn

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