

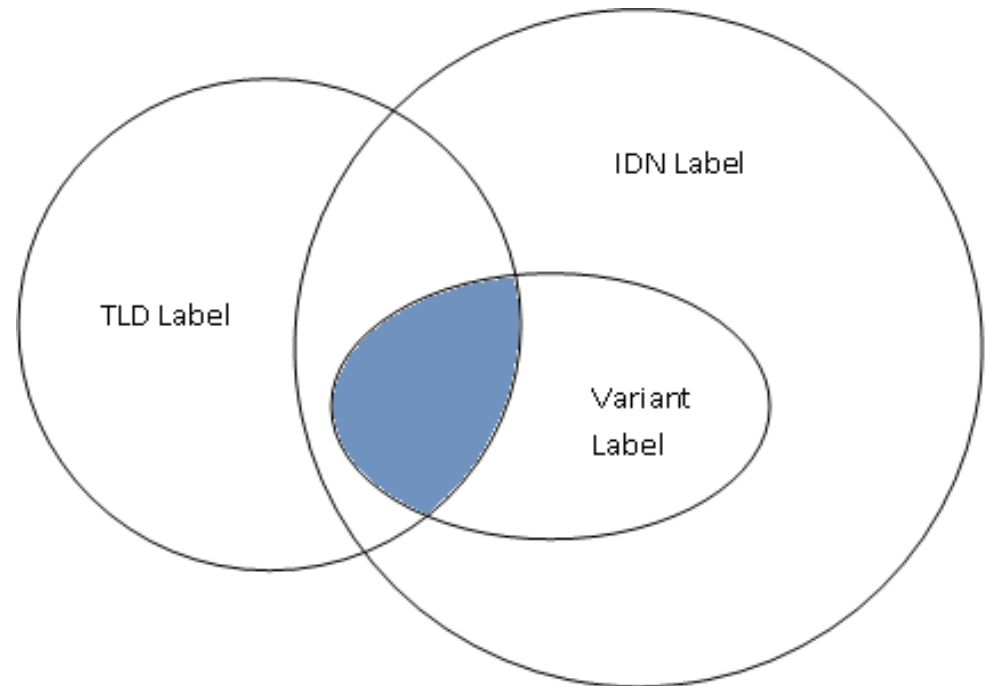
Examining the User Experience Implications of Active Variant TLDs Project

Study Completed in March 2013

<http://www.icann.org/en/resources/idn/variant-tlds/active-ux-21mar13-en.pdf>

Scope of P6 study

- + Focus on TLD label issues but consider FQDN implications
- + Take into account current variant implementations at the second level
- + Balance user expectations with consistent and secure implementations



Existing Variant Experience at SLD level

| | Chinese IDN ccTLDs (3) | Arabic IDN ccTLDs (5) |
|----------------------------------|---|--|
| Status of a variant set | Treated as an atomic unit for operation & Registration data | |
| Limits of active variants | Consistent: 3 | Different, upper limit varies from 3-6 |
| Choice of active variants | All-simplified + all-traditional + one user-choice | User choice |
| Members of variant set | Consistent across all | Different within and across Arabic language ccTLDs |
| Registration software | Custom-built | |
| Registrant support | Hosting by Registrar to manage variants | Registry support for configuration |

Principles for Active IDN Variants TLDs

- + **Minimality:** Variants must be implemented with the least changes necessary in the DNS
- + **Security:** Variants must minimize the risk introduced by IDNs
- + **Equivalency:** Variants must direct users to related content and managed by the same entity
- + **Predictability:** Variants should behave and function as users expect in their language and script environments
- + **Consistency:** Variants should behave similarly within and across TLDs and supporting technology
- + **Manageability:** Variants should be straightforward to visualize and administer with supporting technology
- + **Ease of Use:** Variants should be easy to understand and use for new and existing Internet users



User Roles

+ End Users

- + Those who use the variants

+ Registration Users/Managers

- + Those who manage registration of the variants
- + Registrants, Registrars and Registries

+ Technical Community

- + Those who deal with usability, configuration and diagnostics of the variants
- + System Administrators, Network Managers, Security Managers, Application Developers

Issues Related to Active Variant TLDs

- + **The issues grouped into the three categories**
 - + Use of variants
 - + Registration management
 - + Configuration and diagnostics



Recommendations

- + Based on user experience principles and informed by current IDN variant practices. Recommendations are directed at four audiences:
 - + ICANN (11)
 - + Registries (6)
 - + Registrars (5)
 - + Technical Community (3)

- + The following slides highlight selected recommendations.

Recommendation number 6.1.1. to ICANN

- + Implement a well-defined and conservative variant TLD allocation process:**
 - + Approval of variant TLD must not be automatic
 - + Variant TLD application must clearly demonstrate necessity
 - + TLD variant(s) must be allocated to same entity
 - + All requirements for a TLD application also apply to the variant TLD application

Recommendation number 6.1.2. to ICANN

- + Maintain LGR repository and make it available to users and programmatically processable**
 - + Root zone LGR
 - + State of each variant (activated, withheld, blocked, etc.) of each allocated TLD
 - + Second-level LGR submitted for each TLD

Recommendation number 6.1.3. to ICANN

- + **Develop minimal, simple and consistent IDN LGR for the root zone**
 - + For *character repertoire*: Minimally needed by a given script community; If no consensus for a given code point, default decision leave out; code points should be added at a script level
 - + For *variants*: code point variants be added based on security consideration and/or significant community need; Root LGR variants should be based on script; simpler variant rules preferred

Recommendation number 6.1.6. to ICANN

- + Recommend registries to apply relevant subset of IDN TLD LGR and state life cycle for SLD variants. Justify any deviation.**
 - + Second-level LGR conforms with root LGR to avoid contradiction
 - + Variant state life cycle for second level in line with root zone life cycle
 - + Second-level variants to same registrant
 - + Registry to advise the registrants to point SLD.TLD variants to the same or similar content

Recommendation number 6.2.1. to Registries*

- + **Register any second-level variant labels on approval requirements**
 - + Registration of variant not automatic; initiated by registrant; variants withheld by default
 - + Variant registered to the same registrant
 - + All requirements for label apply to variant
 - + Registration of variants be connected with primary, e.g., if the latter expires, the former also expires

* Applies only to registries that offer IDNs for scripts that have variants

Recommendation number 6.3.2. to Registrars*

- + **Extend linguistic and technical support of IDN variants for registrants**
 - + Support registrants to understand, prioritize, and select/update variants for registration
 - + Support registrants to understand pricing and service level implications of variants

* Applies only to registrars that support the registration of variants

Recommendation number 6.4.1. to the Technical Community

- + Based on requirements, consider enhancing software for administration and management of variants**
 - + Display current status of IDN variant labels (delegated, blocked, active, etc.)
 - + Display both A-labels and U-labels
 - + Update pattern-matching and searching tools for identifying and managing variants
 - + Make client/server software “variant aware” for enhanced monitoring and management of data traffic

Recommendation number 6.4.2. to the Technical Community

- + **Software intended for Internet end users—such as web browsers, email clients, and operating systems—should support variants to the extent necessary to ensure a positive user experience**
 - + Search engines not treating variants equivalent
 - + Variants for user IDs, email addresses, etc.
 - + Keyboards not supporting variants
 - + History logs not deleting variants for privacy settings
 - + Auto-complete functionality not variant sensitive
 - + Sessions not consistent with variants

Input and Guidance on the Recommendations

- + The ICANN Board [requested](#) interested Supporting Organizations and Advisory Committees to provide any input and guidance they may have to be factored into implementation of the Recommendations by 1 July 2013.
- + Staff requests your input on:
 - + Which recommendations if any, are pre-requisites to the delegation of any IDN variant TLDs (i.e., delegation of IDN Variant TLDs should not proceed until these recommendations are implemented)
 - + Which recommendations, if any, can be deferred until a later time
 - + Which recommendations, if any, require additional policy work by the ICANN community and should be referred to the relevant stakeholder group for further policy work

Thank You