

New gTLDs: IDN Variant Management

Current Environment & Recent Developments

On 20 April 2011, ICANN announced the IDN Variant Issues Project to explore the benefits and risks associated with the potential inclusion of IDN variant TLDs in the DNS root zone. [It was decided that ICANN would not delegate variant TLDs](#) until an Issues Report be done and then a set of rules could be put in place to ensure delegations would occur in a stable way that promotes good user experience.

The first phase involved the formation of six case expert study teams for the Arabic, Chinese, Cyrillic, Devanagari, Greek, and Latin scripts, resulting in the publication in October of six individual [reports](#) detailing the issues associated with delegating variant TLDs in those scripts.

To advise in the integration of these results into a single Issues Report, [ICANN formed a coordination team](#) comprised of experts from each of the case study teams.

On 23 December 2011, ICANN published for [public comment](#) the draft [Integrated Issues Report](#). The report will be updated to reflect community feedback and will be presented to the ICANN Board of Directors at the ICANN public meeting in Costa Rica in March 2012.

To preclude inadvertent allocation or delegation of IDN variant TLDs to different applicants, and avoid outcomes in the gTLD evaluation process that set up later conflicts, ICANN will perform a set of checks (described in Appendix 5 of the draft Integrated Issues Report) to detect potential conflicts between IDN variant TLD strings during the evaluation of the first round of gTLD applications.

Variant Management Plan Going Forward

Based on the complexity of issues raised in the Issues Report, ICANN should maintain the *status quo* that no IDN variant TLDs be allocated/delegated/activated during the first round of gTLD applications until appropriate variant management solutions for the root are developed.

ICANN will start the work on potential solutions for the management of variants in the root as soon as possible.

ICANN will perform a set of checks on potential IDN variant TLDs during the first round of gTLD applications to avoid potential problems.

Rationale for Next Steps

1. Phases one and two of the IDN variant TLD project were designed only to identify and describe issues. Therefore, the draft Integrated Issues Report describes a set of issues related to the identification, implementation, and management of variant TLDs in a stable and secure way that promotes a good user experience. The report does not propose solutions to the issues identified. More work needs to be done, in coordination with relevant experts in order to develop solutions or, alternatively, to conclude that variant TLDs are not implementable in a cost-effective way for the Internet community.
2. In order to plan for the eventual allocation/delegation/activation of IDN variant TLDs, it is crucial to continue the work of the IDN variant TLD project – focused on the development of solutions. It is tentatively planned that arriving at a determination on whether IDN variant TLDs can be implemented, can be completed during calendar year 2012.
3. Many of the issues described in the draft Integrated Issues Report are complex, and it is clear that the cases in the script studies vary widely. The classification depicted in the report demonstrates that there is not a single “variant problem” to which a solution may be developed, but an array of unique characteristics and considerations to be taken into account when considering any type of implementation model.
4. As an additional indication of complexity, the term “variant” has been used by experts in multiple ways, to indicate a relationship between two or more labels or names. It has been used variously to refer to, for example, a particular relationship between specific characters or code points in a particular script, a set of alternate labels where some linkage relationship is articulated, a desired procedure whereby names are registered in multiples, or a desired functionality causing shared behavior by some set of identifiers. There is today no fully accepted definition for what constitutes a variant relationship between top-level labels.
5. New gTLD first round: Since there is not an agreed processes for managing IDN variant TLDs, it is necessary to do a set of checks (described in Appendix 5 of the draft Integrated Issues Report) in the applied-for IDN TLD strings and their potential variants to avoid problems. An applied-for string should be put in a contention set whenever it or any of its variants is equal (code point by code point) to any variant of any other applied-for string. Any such cases should be reviewed on a case-by-case basis (the potential for such instances is small and can be handled manually).