The IDN Variant TLD Program – An Overview

The Internationalised Domain Names (IDN) Variant TLD Program is designed to enable the allocation and delegation of IDN Variant TLDs in the Domain Name System Root Zone.

The LGR:

The key to the Program is the development of the additional Label Generation Rules (LGR) for IDNA Labels in the Root Zone.

The LGR includes the complete list of the valid and permitted code points for the root, plus the unique collection of code point substitution rules for code point variants – code points that, for one reason or another, are considered interchangeable – plus the rules for which code points, and the resulting TLD labels, must be blocked (prohibited from use) and rules for which of the resulting TLD labels may be allocated and delegated to a TLD Registry operator by ICANN.

The LGR will be made available publicly to potential TLD applicants. In particular, the LGR will be used by ICANN to validate the IDN TLD applications and to ensure that there are no conflicts between a new TLD label application and the variants of existing TLDs, or between TLD applications. It may also be possible to use the published rules for other kinds of automatic processing such as in configuring systems

Current Projects:

Today, the IDN Variant TLD Program has three projects underway.

The first project – the LGR Tool Project (P1) – is to develop a software tool and algorithm to validate the LGR and to perform the actions that ICANN will require to process IDN Variant TLD applications.

The second Project – The Development and Maintenance of the Label Generation Rules for the DNS Root Zone in Respect of IDNA Labels, Project (P2.1) – is to develop the Process for the creation and maintenance of the LGR. The Project Team consists of a number of consultant experts recruited by ICANN, supported by a team of Internet community experts from across the globe. The team's current thinking on the process that is to be used to develop and maintain the LGR is described below.

The third project – Examining the User Experience Implications of Active Variant TLDs Project (P6) – is to develop an understanding of the issues that need to be addressed to ensure that the users experience when dealing with of IDN Variant TLDs is satisfactory, reliable and predictable. (Users include end users, software developers, and applications developers.). The output of this project will inform the later project work. It is anticipated that the first draft document from this project will be published after the ICANN Toronto Public Meeting.

Future Projects:

On completion of these three projects, and subject to ICANN Board approval, the Program will move to the implementation of IDN Variant TLDs. The key implementation project will be Project P2.2, the actual development of the LGR for IDNA Labels in the Root Zone.

In addition, the implementation work will include projects to update ICANN's gTLD and ccTLD Programs, and to update ICANN Operations to enable the processing of IDN Variant TLD applications and the implementation of the associated contracts.

Current Thinking on the LGR Development Process:

As currently envisioned, a two-stage process will be used to develop the LGR for IDNA TLDs. The process will be driven by the Primary Panels - each with participants that have deep expertise in a particular writing system. It is anticipated that these panels will develop the set of rules for their particular script or language environment, and that their output will represent the desired LGR elements for that environment.

It is envisioned that these panels will submit their proposals for the LGR to an ICANN Variant TLD panel of independent experts in DNS, Unicode and scripts – the Secondary Panel - that will have responsibility for integrating the proposals into a single LGR for the Root Zone, taking into account the need for a secure, stable and reliable DNS Root Zone.

Any proposal for the LGR that cannot be accommodated by the Secondary Panel will be returned to the originating panel for additional work – and this dialogue and interaction will continue until the Secondary Panel is satisfied that the proposal can be accommodated in the LGR.

From time to time, the Secondary Panel will release a version of LGR to ICANN and to the Internet Community to enable the evaluation, processing and potential deployment of the IDN variant TLD applications.

It is envisioned that the LGR will be built up over time, beginning with the work of those panels that have the expertise and experience to develop a proposal for the LGR for their scripts or language environment. It is expected that additional panels will be established over time and that their work will be integrated into the root LGR as the proposals are completed and agreed.

The Secondary Panel – the ICANN Variant TLD panel – will be expected to take a safe and conservative approach to the evaluation and integration of the LGR proposals from the Primary Panels, and to the release of the various versions of the unified LGR.

For more information, please see the invitation to comment on the first public draft of the document "Procedure to Develop and Maintain the Label Generation Rules for the Root Zone in Respect of IDNA Labels" at www.icann.org/en/news/public-comment/lgr-procedure-24sep12-en.htm