

From Maximal Starting Repertoire to IDN Root Zone Label Generation Rules Summary Guidelines

Creating a set of Label Generation Rules (LGR) for IDNA labels for the Root Zone is the primary task of a Generation Panel. The rules will define code points, variants and additional label level constraints for the Root Zone. Each set of rules normally applies to one script.

The task breaks down as follows:

1. Start with Maximal Starting Repertoire

The Integration Panel, a body of independent experts, has established a “Maximal Starting Repertoire” following the prescription outlined in the *“Procedure to Develop and Maintain the Label Generation Rules for the Root Zone in Respect of IDNA Labels.”* The MSR defines the set of code points from which the Generation Panels make their selection. Section 7 in the *Overview and Rationale* document gives suggestions how to use it as a starting point.

- To view the announcement: <https://www.icann.org/news/announcement-2-2015-04-27-en>
- To view the Overview and Rationale document: <https://www.icann.org/en/system/files/files/msr-2-overview-14apr15-en.pdf>

2. Select the Code Points to include

A Generation Panel starts with those code points in the MSR used for a given script. It then reviews these code points for appropriateness for inclusion in the root zone LGR and makes a selection. In making the selection, and to document the rationale supporting its choice, the Generation Panel may take into account the set of “Considerations for Designing a Label Generation Ruleset for the Root Zone”.

- To view the *Considerations*: <https://community.icann.org/download/attachments/43989034/Considerations-for-LGR-2017-09-15.pdf>

3. Determine the Existence and Dispositions for Code Point Variants

A Generation Panel will review the repertoire to decide whether there are any code points that are variants of each other (there may be none). If there are, the panel will consider the appropriate dispositions for labels that differ only by containing code points that are variants of each other.

In making these decisions the panel may take into account the set of “Considerations for Designing a Label Generation Ruleset for the Root Zone” applicable to variants, as well as the guidelines in RFC 8228.

- To view RFC 8228: *Guidelines for designing Label Generation Rulesets supporting Variants*: <https://www.rfc-editor.org/rfc/rfc8228.txt>

4. Decide Whether Labels Need to Be Restricted Further By Whole Label Evaluation Rules (WLE)

A Generation panel may decide that some sequences of code points must not occur in a label, even though they are individually part of the Repertoire. In that case, the Panel creates optional Whole Label Evaluation rules, as described in the Procedure, Section 7 of the MSR and the Considerations. WLE are a complex matter, and the Generation Panel is advised to discuss these beforehand with the Integration Panel.

- To view the *Whole Label Evaluation (WLE) Rules* document: <https://community.icann.org/download/attachments/43989034/Whole-Label-Evaluation-Rules-2017-09-15.pdf>

5. Deliverables of the Generation Panel

The Generation Panel is expected to provide a formal description of the LGR and to document its rationale behind the decisions that result in the design of its LGR. The “Considerations” document may help in that process, but the Panel should also review whether its decisions fit with the set of Process Goals and Principles set out in the “Procedure”. The “Requirements for LGR Proposals” document describes the expected format.

- To view the *Requirements for LGR Proposals* document: <https://community.icann.org/download/attachments/43989034/Requirements-for-LGR-Proposals-2017-09-15.pdf>

Additional Guidelines

A more detailed version of these guidelines exists

- To view the “Guidelines for Developing Script-Specific Label Generation Rules for Integration into the Root Zone LGR” document: <https://community.icann.org/download/attachments/43989034/Guidelines-for-LGR-2017-09-25.pdf>

Additional Resources

The Procedure to Develop and Maintain the Label Generation Rules for the Root Zone in Respect of IDNA Labels defines the process for establishing the Label Generation Rules (LGR) for the root zone. The LGR governs the way a zone is operated. The procedure defines the outcome of a Generation Panel’s work, and provides general instructions as well as Principles and Process Goals to help the Panel in forming its decisions.

- To view the “Procedure to Develop and Maintain the Label Generation Rules for the Root Zone in Respect of IDNA Labels” (Procedure): <https://www.icann.org/en/system/files/files/draft-lgr-procedure-20mar13-en.pdf>
- To access the Root Zone LGR Project workspace for community members, which contains all relevant information, such as Panel status updates, Integration Panels and advisor bios, Generation Panels’ memberships, contact information and Panel mailing lists, as well as a project Document Repository, please visit: <https://community.icann.org/display/croscomlgrprocedure/Root+Zone+LGR+Project>
- For more info on the IDN Variant related pages, please visit: <https://www.icann.org/resources/pages/variant-tlds-2012-05-08-en>

If you have additional questions, or for assistance, please contact ICANN at: identlds@icann.org