Internationalized Domain Names Expedited Policy Development Process

Wrap up A6, A7, A9, A10



EPDP on IDNs Team Call #21 | 27 January 2022

A6 Recap



Draft Recommendations

Recommendation 1.4: To the extent feasible, the LGR Procedure be updated to specify the limited circumstances that could result in an update to the RZ-LGR not being able to retain full backward compatibility with existing gTLDs and their delegated and allocated variant labels (if any).

Recommendation 1.5: In the unexpected event where an update of the RZ-LGR is unable to retain full backward compatibility for validating any existing gTLDs as well as their delegated and allocated variant labels (if any), the Generation Panel (GP) must call out the exception during a public comment period and explain the reasons for not providing such support. The GP analysis should also include identified security and stability risks.

To ensure balanced representation of the issues, the public comment process must also provide an assessment of the potential impact of not validating the existing gTLD as well as their delegated and allocated variant labels (if any) on the gTLD registry operator, their customers, and end users.

Recommendation 1.6: All existing gTLDs and their delegated and allocated variant labels (if any) affected by the aforementioned exception will be grandfathered.



Outstanding Questions

- 1. The second part of the charter question has not been addressed: "To what extent should the TLD policies and procedures be updated to allow an existing TLD and its variants (if any), which are not validated by a script LGR, to be grandfathered?" Is this an item that could be addressed by the IRT?
- 2. Should the public comment include any mitigatory action to address potential security and stability risks associated with not achieving full backward compatibility? If so, is the Generation Panel in position to propose such mitigatory action?
- 3. Which entity is in position to provide an analysis of the potential impact on the gTLD registry operator and other user experience?
- 4. Should the public comment also include any **proposed mechanism to reduce the impact** on the affected gTLD registry operator and user experience? If so, **which entity** is in position to propose such a mechanism?



A7 Recap



Where We Are

Q: What mechanism or criteria should be used to identify the scripts/languages appropriate for single-character TLDs?

• Single character gTLDs may be allowed only for the Han script and the Chinese, Japanese, and Korean languages.

Q: What mechanism or criteria should be used to identify a specific list of allowable characters which can be used as a single-character TLD within such scripts/languages? Should any specific implementation guidance be provided? Furthermore, should the relevant GP tag these code points in the RZ-LGR for a consistent analysis and to ease their identification and algorithmic calculation?

- Does the EPDP Team wish to outsource this question to the Chinese, Japanese, and Korean Generation Panels?
- If yes, a clear set of instructions would need to be provided. Suggestion:
 - What is expected to be covered within RZ-LGR?
 - What should be covered in additional separate processes, e.g., string similarity review?
 - Specify whether it is an inclusion or an exclusion list
 - ICANN staff can reach out to the GP chairs; Integration Panel also needs to be involved
- If no, what's the alternative approach?
 - Suggestion: An applicant who applies for single-character TLD pays for an analysis as part of the application process that identifies security and stability risks, string similarity concerns, etc.



A9 Recap



Why are these questions asked?

- Variant labels may take a range of possible states and corresponding actions. A variant management mechanism could encompass both active use of labels and prevention of labels from use in the DNS
- Consistency: have consistent understanding of what different label states entail and use consistent terminology for defining them
- Label states result in different user experiences and impact various Internet stakeholders:
 - ICANN
 - Registry operators
 - Registrants
 - Software developers
 - Law enforcement and security
 - End users
- Ensure the stable and secure operation of the DNS and avoid failures related to DNS resolution or inconsistent resolution



Proposed Definition Details in Staff Paper

Blocked: A status of some label with respect to a zone, according to which the label is unavailable for allocation to anyone. The term "to block" denotes the registry (the zone operator) taking this action.

Withheld-same-entity: A Withheld label is set aside for possible allocation only to the same entity of the other labels in the variant set. Note that this status does not guarantee that the label in question will in fact be allocated (because the label is also subject to other application conditions).

Rejected: A Rejected label is set aside on administrative grounds outside the ordinary LGR procedures. In the gTLD application states, this state encompasses both "Not Approved" and "Will Not Proceed". Labels that cannot be allocated on visual confusability grounds, based on the string similarity review step in the TLD application process, are also Rejected. If a single label in an IDL set is Rejected, it can return to Withheld-same-entity, but the condition is only satisfied if the Rejected status can be removed.

Allocated: A status of some label with respect to a zone, whereby the label is associated administratively to some entity that has requested the label. This term (and its cognates "allocation" and "to allocate") represents the first step on the way to delegation in the DNS. When the registry (zone operator) allocates the label, it is effectively making a label a candidate for activation. Allocation does not, however, affect the DNS at all.

Delegated: A status of some label with respect to a zone, indicating that in that zone there are NS resource records at the label. The NS resource records create a zone cut, and require an SOA record for the same owner name and corresponding NS resource records in the subordinate zone. The act of entering the NS records in the zone at the parent side of the zone cut is delegation, and to do that is to delegate. This definition is largely based on RFC 1034; the reader should consult RFC 1034 for detailed discussion of how the DNS is broken into zones.



Where We Are

A9: A given label in an Internationalized Domain Label (IDL) set may be in one of the following non-exhaustive status: delegated, withheld-same-entity, blocked, allocated, rejected. The WG and the SubPro IRT to coordinate and develop a consistent definition of variant label status in the IDL set.

Suggestions discussed:

- Streamline the states into three categories:
 - Blocked
 - Withheld-same-entity; withheld-same-entity (allocated); withheld-same-entity (rejected)
 - Delegated
- Develop other terms to better differentiate "delegated" from "allocated"
- Add the state "reserved" and provide definition
- As a parking lot item, define additional terms not related to label states, such as "variant" and "bundle"
- Revise and finalize the label states after the EPDP Team has explored all the possible scenarios when addressing the rest of the charter questions



A10 Recap



Possible Label State Transitions in Staff Paper

2. From "rejected" to "withheld-same-entity" 1. From "blocked" to "withheld-same-entity" Every Rejected label is automatically A later LGR may broaden the available labels in Withheld-same-entity as well. If the Rejected status the IDL set. Such possible labels automatically comes off, the label can be handled as any other become withheld-same-entity Withheld-same-entity label. Withheld-same-entity Blocked Rejected 4. From "allocated" to "delegated" Happens when name servers are added (Not new.) 3. From "withheld-same-entity" to "allocated" Allocation only to the same entity as another label Allocated in the IDL set. This change happens if a variant was not initially requested for allocation and later is. Allocating withheld labels would be the application process for a variant TLD Delegated 5. From "delegated" to "allocated" Note: an allocated or If a domain is removed from the DNS, the withheld-same-entity label allocation can remain in place anyway. Rare in the cannot become blocked root zone, but not new.



Where We Are

A10: What is the procedure to change the label status for individual variant labels?

- The EPDP Team agrees with the the label transition paths defined in the staff paper at this time.
- Revisit after the EPDP Team addresses other charter questions and examines potential implications.

