

Internationalized Domain Names Expedited Policy Development Process

Wrap Up A9, A10; Start Deliberations on B1, B2



EPDP on IDNs Team Call #22 | 3 February 2022

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

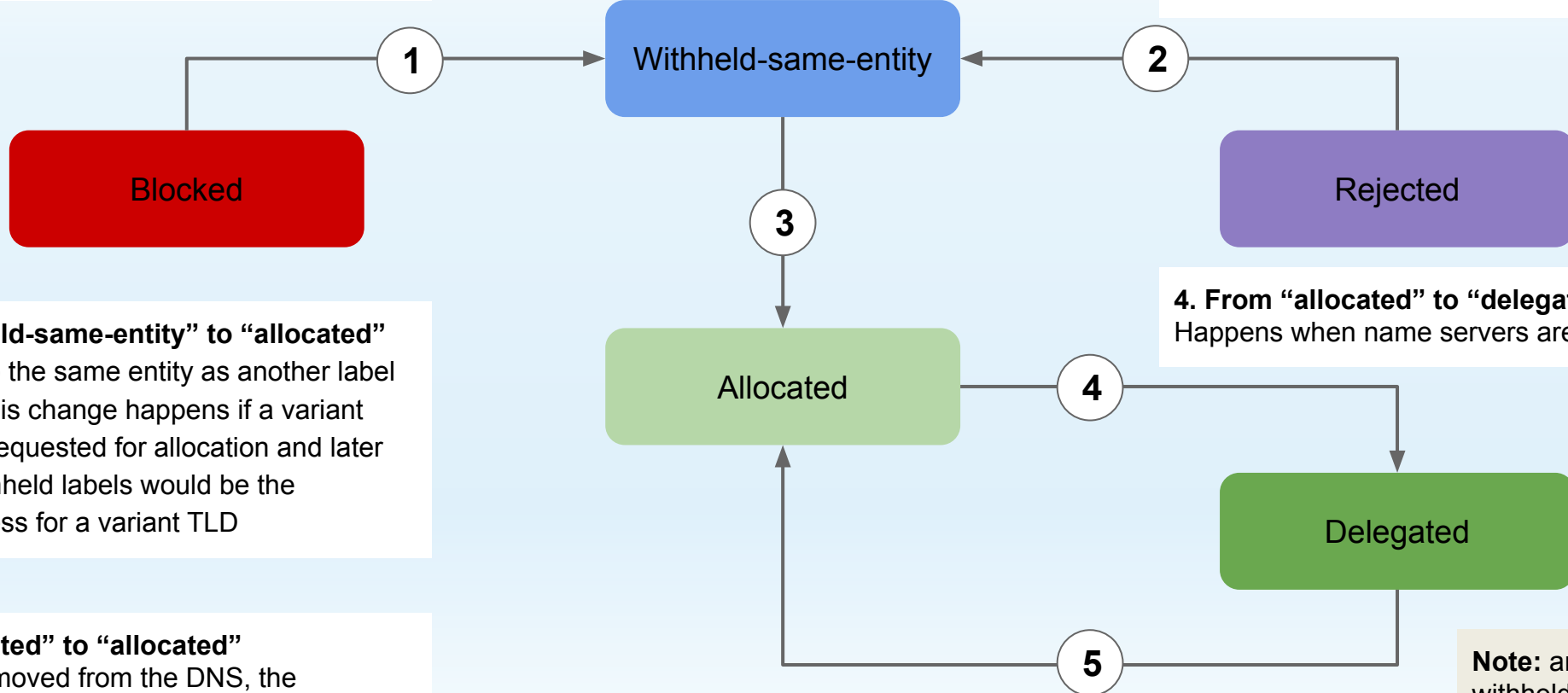
Possible Label State Transitions in Staff Paper

1. From “blocked” to “withheld-same-entity”

A later LGR may broaden the available labels in the IDL set. Such possible labels automatically become withheld-same-entity

2. From “rejected” to “withheld-same-entity”

Every Rejected label is automatically Withheld-same-entity as well. If the Rejected status comes off, the label can be handled as any other Withheld-same-entity label.



3. From “withheld-same-entity” to “allocated”

Allocation only to the same entity as another label 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

4. From “allocated” to “delegated”

Happens when name servers are added (Not new.)

5. From “delegated” to “allocated”

If a domain is removed from the DNS, the allocation can remain in place anyway. Rare in the root zone, but not new.

Note: an allocated or withheld-same-entity label cannot become blocked

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.

B1 & B2 Introduction

Charter Questions B1 & B2

B1: Both the SubPro PDP and the Staff Paper recommend that variant TLDs that ICANN delegates must have the “**same entity**” as the sponsoring organization and the “Registry Operator” be used as the definition of the “same entity” at the top-level. Should this recommendation be **extended to existing TLDs**?

B2: Both the SubPro PDP and the Staff Paper recommend that variant TLDs be operated by the **same back-end registry service provider**, the organization providing one or more registry services (e.g., DNS, DNSSEC, RDDS, EPP) for a registry operator. Should this recommendation be **extended to existing TLDs and their variant TLD labels**?

Origin - SubPro PDP Recommendation 25.5

SubPro Recommendation 25.5: IDN gTLDs identified as variant TLDs of already existing or applied for gTLDs will be allowed only if labels are allocated to the **same entity** and, when delegated, only if they have the **same back-end registry service provider**. This policy must be captured in relevant Registry Agreements.

Rationale:

- In support of security and stability, and in light of the fact that variant TLDs are considered to essentially be identical, SubPro believes that **variant TLDs must be operated by the same registry operator and must have the same back-end registry service provider if delegated**
- SubPro had some limited discussion regarding how an applicant would be able to seek to obtain allocatable variant TLDs, for both existing gTLDs and new gTLDs. As these deliberations arose late, SubPro elected to only recommend the “same entity” principle for variant TLDs
- SubPro took into account the Staff Paper recommendations 2 & 7

Origin - Staff Paper Recommendations 2 & 7

Staff Paper Recommendation 2: IDN variant TLDs {t1, t1v1, ...} allocated to the same entity. For IDN variant TLDs that arise from an application and the RZ-LGR, all allocatable IDN variant TLD labels in the set must be allocated to the same entity or withheld for possible allocation only to that entity. In other words, for a top-level label t1 allocated to Entity X, its allocatable variant label t1v1 must only be allocated to Entity X or else withheld for possible allocation only to Entity X.

Staff Paper Recommendation 7: Same registry service provider for IDN variant TLDs. For feasible and consistent implementation of these requirements, **the same back-end registry service provider, if applicable, must be employed for operating all the activated IDN variant TLDs by the registry operator.**

Rationale:

- “Failure mode” – denial of service & misconnection – presents security implications
- Delegated variant names must have the “same entity” as the name holder to reduce risks of failure mode
- Having the same entity at the top level can be achieved by ensuring that the Registry Operator is the same
- Ensuring the sponsoring organization (including the name and address) for the two variant TLDs is the same, and that is reflected in the root zone Registration Data Directory Services (RDDS) operated by IANA