Domain “Variant” Support For EPP

James Galvin
Michael Bauland
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Agenda

- Principles
  - Guiding architectural principles
  - Guiding technical principles
- Definitions
- Quick review of previous presentation
  - No Changes; Minor Technical Changes
  - Significant Technical Changes
  - RDAP query for a variant label
- Open Issues
  - Significant; In progress
- Request for working group adoption

Guiding Architectural Principles

- Backwards compatibility is a requirement
  - Supporting IDN Variants is optional
  - Ensuring no accidental activation of a variant is a requirement
- *Related domain objects MUST be managed by the “same entity”*
  - *Registrars implement requirement on registrants*
  - *Registries implement requirement on registrars*
- IDN Variants are managed as a **set**
  - Derived from “same entity principle”

Guiding Technical Principles

- Primary label defines the set within a TLD
  - Lifecycle of all members of the set matches the primary
  - Primary label must be created first - when it is deleted or expired all variants are impacted
- SLD variant sets operate inside a variant set of TLDs
  - SLD variant labels can be spread among a TLD variant set
  - Variant labels must be able to have different NS records and DS records
  - Variant labels may have different contact objects - must have same registrant
- At least conceptually, three “statuses” now exist for a variant label
  - Allocated - essentially a reservation of a variant label upon primary label creation
  - Activated - RNH has indicated intent to use variant label but may not have assigned NS
    - Delegated - RNH has assigned NS (and optionally DS)
  - Blocked - variant labels that are ineligible for activation

Definitions for Labels

- Primary - Source is the first Primary across variant TLDs
- Variant
- Allocatable
- Allocated
- Exempt - replaces “Grandfathered”
- Blocked
- Normal

No Changes

- <renew> command
- <transfer> query

Minor Technical Changes

- <check> has new error responses
  - Variant of a primary or exempt
  - Transfer in progress
- <info> has optional extension
  - If label is variant include reference to primary
- <transfer> command
  - Transfer of primary impacts all labels in variant set
  - Transfer of variant is an error
- <delete> - no change to query
  - Delete of primary impacts all labels in variant set
  - Delete of variant impacts only the variant

Significant Technical Changes

- <create> command
  - Principal task is to create a new normal domain
  - To support variants, the <create> would include an optional extension flagging the label as a Primary if appropriate
    - Registry must still recognize label as a potential primary and must Block all variant labels upon creation - extra rules related to Exempt
- <update> command
  - New additional task - provisioning of variant label
  - To support variants, the <update> would be directed at the desired variant label and include an extension identifying the Primary label
  - To “update” the “status” of a Normal domain to a Primary domain, the <update> would be directed at the Primary label and the same label would present in the extension.

RDAP - query for variant label

- If the variant label is “blocked”
  - The response code must indicate the label is unavailable
  - The response must include the extension with settings as follows:
    - The primary label must be set to the primary label
    - The language tag must be set
    - The remarks element must be set to indicate the status is blocked
- If the variant label is “allocated”
  - The response code must indicate the label is reserved
  - The response must include the extension with settings as follows:
    - The primary label must be set to the primary label
    - The language tag must be set
    - The remarks element must be set to indicate the status is allocated
- If the variant label is “activated”
  - The response code must be set to indicate the label is registered
  - An ordinary base response must be created using variant label information
  - The response must include the extension with settings as follows:
    - The primary label must be set to the primary label
    - The language tag must be set
    - The remarks element may be set to indicate additional information

Open Issues - Significant

- Switch from “variant” to “related group”
  - Needed to support Latin diacritic marks
  - Focus on registry, not TLD
- Use of <delete> vs <update> for removing variants
  - Currently use <delete> - arguably inconsistent
  - Should probably have <update> directed at primary, not variant

Open Issues - In Progress

- Alignment with “EPP Extensibility and Extension Analysis”
- Better support for registrars
  - <check> command could be used to identify the primary
  - <info> command could be used to return all primary labels
    - Optionally return activated variants
  - <transfer> query
    - Extend response for variant-aware clients to include all impacted labels
  - <transfer> command
    - Response should identify all activated labels to gaining registrar
    - Losing registrar should be alerted to all activated labels impacted
- Response codes and error messages

Request for Working Group Adoption

- Previously requested at IETF121
- Received excellent feedback
  - Added more detail to the document
- This is a problem that needs a solution
- We believe that this proposal is both stable and a good starting point