A Tool is Necessary for Easy Management of Bundled Domain Names

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With the emergence of new TLDs, two names used for the same purpose may require to redirect one name space fully to another name space. Bundled domain names are those who share the same TLD but whose second level labels are variants, or those who has identical second level labels for which certain parameters are shared in the different TLDs. For example, public Interest Registry, request to implement technical bundling of second level domains for .NGO and .ONG. So we have two kinds of bundled domain names. First one is in the form of "V-label.TLD" in which the second level labels (V-label) are variants sharing the same TLD. Second one is in the form of "LABEL.V-tld" in which the second level labels (LABEL) are same with the different TLDs (V-tld). Bundled domain names usually need to map itself and its descendants to another. Some examples are shown below.

Use Case 1: Same label ending with different TLDs
example.com == example.net

Use Case 2: Different labels ending with the same TLD
color.com == colour.com

What are the requirements for bundled domain names?

There are two requirements for bundled domain names. Firstly, bundled domain names should know each other. It means that domain name A and B should know each other if these two names are bundled. Secondly, bundled domain names can be mapped with each other. If two names are registered for the same purpose, one name may be regarded as another name’s shadow name and be mapped to the other in DNS resolution.

What are the current solutions for these requirements?

1. How bundled domain names know each other?
Currently, one solution has been proposed in draft https://datatracker.ietf.org/doc/html/draft-yao-dboud-dns-solution-
2. How bundled domain names to be mapped in DNS resolution?
A) If one domain name wants to map itself to another domain name, the CNAME will be used for that name.
B) If the name wants to map its descendants to other domain, the DNAME will be used.
C) If the name wants to map itself and its descendants to another domain, there are three proposed solutions:
   ZONE clone:
   C+D:
   BNAME:

Dnsbundled BoF
A BoF was held at IETF97 to discuss the requirements for creating a set of domain names that are to be interpreted as equivalent. For more information, please refer to https://datatracker.ietf.org/group/dnsbundled/about/.