Use Cases
.CN & .GR
Jiankang Yao
DNS Bundled Domains
.CN & .GR cases

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IETF 97
Under .CN, there are more than 2 Million Chinese Domain Names

- Bundled Domain Names
  - 互联网中心.cn
  - 互聯網中心.cn

- All bundled Chinese Domain Names under .CN are Configured to have same NS records, and are supposed to have the same DNS resolution
.GR use cases

• All of Greece male names end at a final sigma (about 30% of Greece IDN domain names)

• .GR bundled domain names,
  ✓ The upper case (ends at a normal sigma, without tonos)
  ✓ The lower case (ends at a final sigma, has a tonos sign)
  ✓ The lower case with a final sigma, without a tonos as a bundle.

• Use DNAME for bundled domain names under .GR
  ✓ Νίκος.gr (xn--kxawhkp.gr), ΝΙΚΟΣ.gr (xn--uxachku.gr) and Νικος.gr (xn--uxachkp.gr) at the registry level

_Vaggelis Segredakis said:_”As you understand, it would be perfect for the user if it could be possible with one DNS entry to have all these up and running, however with today’s solutions this is not an option. We have asked in the past for a unified RR in the top level to deal with such mappings but it was rejected from certain members of the technical community as not viable. So, I am happy to see your effort moving along and I hope there is a way to overcome certain difficulties that might appear in the way.”

_The information here is provided by Vaggelis Segredakis from .GR registry_
Use Cases

.TW

Naiwen Hsu
DNS Bundled Domains
.TW use cases

Nai-Wen Hsu (snw@twnic.net.tw)
TWNIC
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Bundled Domains for Same registrant and same destination
DNAME solution

Root zone
台灣 IN NS xxx
台灣 IN NS xxx

台灣 zone
台灣. IN DNAME 台灣.

台灣 zone
TDN IN NS XXX
SDN IN DNAME TDN
(zone file data)....

(1) Query SDN.台灣
(2) Response 台灣 DNAME 台灣
(3) Query SDN.台灣
(4) Response SDN.台灣 DNAME TDN.台灣

Cache DNS
DNAME issue

• Pro
  – Registrant only maintain single zone regardless of how many bundled domains

• Con
  – The owner name of a DNAME is not redirected itself
Use Cases
.CZ
Ondřej Surý
Internet Naming Aliases

.CZ Use Cases

Ondřej Surý • ondrej.sury@nic.cz • 16. 11. 2016
Latin Extended-A vs US-ASCII problem

Many Czech words contain characters with acute, caron and ring

Žluťoučký kůň pěl řáděl hřebíky ódy

The usual mapping just strip the diacritics marks

It might change the meaning of the word

Examples

vláda – government (vlada.cz)

Vláďa – a male name

nic – nothing

nič – destroy (IMP)
Script problem or naming problem?

Synonyms?

chlapec – hoch – kluk (all mean “a boy”)

Dashes?

knot-dns.cz vs. knotdns.cz

vse-pro-chleba.cz vs. vseprochleba.cz

Brands

ietf.org vs bearded-kindergarten.org
Case Studies
GoDaddy
Richard Merdinger
DNS Bundled Domains
Registrar Perspective
(aka Beyond DNS)

Richard Merdinger
<rmerdinger@godaddy.com>
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Multidimensional identity use cases

Today
• ricksrestaurant.com
• ricksrestaurant.com/menu
• ricksrestaurant.com/asia
• ricksrestaurant.com/jp
• ricksrestaurant.com/tokyo
• ricksrestaurant.com/yokohama

Tomorrow
• ricksrestaurant.com
• ricks.restaurant
• ricks.menu
• ricks.asia
• ricks.jp
• ricks.tokyo
• ricks.yokohama
Hundreds of Registries, Thousands of Registrars
Millions of Identities

- Bundled Domain Names = Identities
- More than DNS Records
  - Allocation: Registries, Registrars, EPP
  - Management: Registrars, Registrars, Resellers
  - Resolution: DNS
  - Content: SSL, Web, Mail, Apps
- Today’s solution not fit for gTLDs
  - Left to right more general
  - Single SLD per SSL, etc.
- Need a solution to bind multi-domain identities from the “outside”