

.JP technical update

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Topics

- Japanese JP Domain Name
(ドメイン名例.jp)
- Technical update of .JP DNS servers

Japanese JP domain name (ドメイン名例.jp)

- We launched IDN standards (RFCs)-compatible Japanese JP domain name registration service on July 10, 2003
- Registration policy of Japanese JP domain names is in compliance with the “guideline” of ICANN
 - “Guidelines for the Implementation of Internationalized Domain Names”
- Our guideline (Internet-Draft)
 - draft-yoneya-idn-jachar-00.txt

Available characters, variants

- Available characters
 - Hiragana, Katakana, Kanji
 - The selection is based on JIS (Japanese Industry Standard)
 - Several marks regarded as a Kana or a Kanji
- Variants
 - No variants defined
 - In our draft: “... However in the name, especially in the proper noun, those aren't interexchangeable because of their own identity. Actually, there is no official Kanji variants table in Japan.”

Service Migration to IDN standards

- “Resolution Overlap Period”
 - Both NS records of Punycode and RACE on .JP DNS servers during ROP (as seen below)
 - To enhance smooth migration of DNS and/or Web server settings from RACE to Punycode

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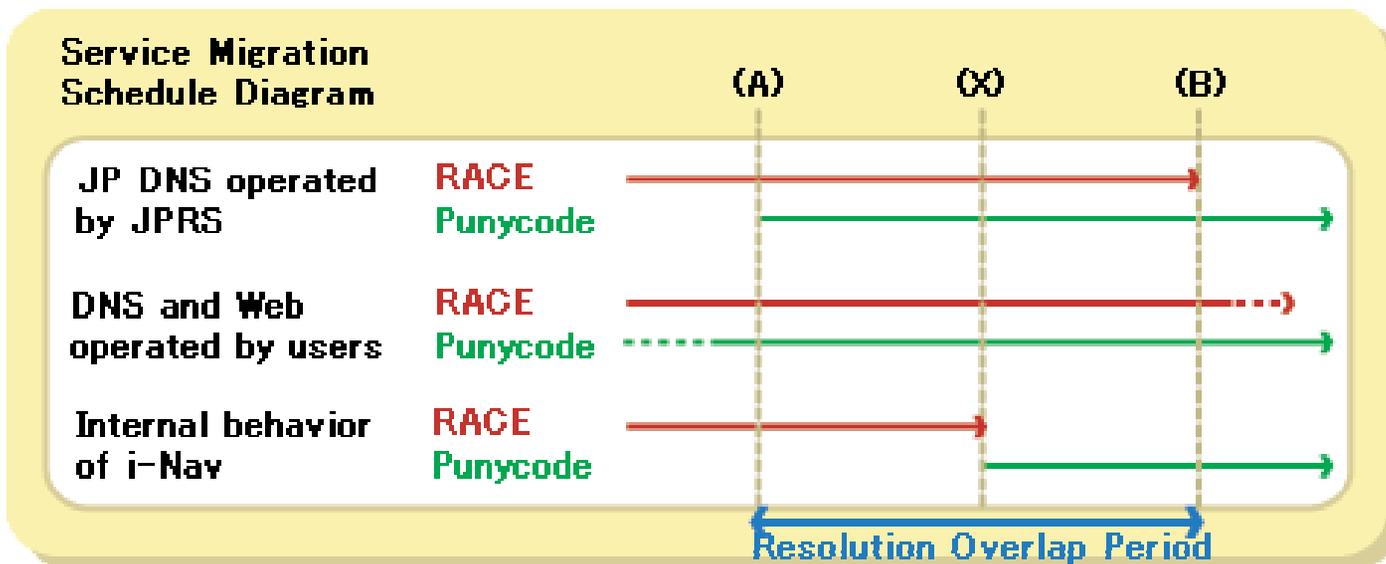
; 日本レジストリサービス.jp
; Punycode
xn--vckfdb7e3c7hma3m9657c16c.jp.      IN NS ns1.jprs.co.jp.
                                           IN NS ns1.jprs.co.jp.

; RACE
bq--3bs6kzzmgdwdbobqxeymqmhkgc2tb7bq2myls.jp.  IN NS ns1.jprs.co.jp.
                                           IN NS ns2.jprs.co.jp.

```

Our schedule

- (A) Starting ROP – already done on July 10
- (X) i-Nav™ plug-in is changed into Punycode version – already done on July 30
- (B) Termination of RACE support – September 3



Technical update of .JP DNS servers

- Topics
 - Unifying hostname of .JP DNS servers
 - Changing the location, IP address and AS number of E.dns.jp
 - Future plans

Unifying hostname of .JP DNS servers

- Hostnames of .JP DNS servers are unified to [A-F].dns.jp on June-August 2003
 - Primary server
 - A.dns.jp: operated by JPRS
 - Secondary servers (*)IPv6 ready
 - B.dns.jp: formerly ns0.nic.ad.jp
 - C.dns.jp: formerly dns0.spin.ad.jp
 - D.dns.jp: formerly ns0.iiij.ad.jp(*)
 - E.dns.jp: formerly ns.wide.ad.jp(*)
 - F.dns.jp: formerly ns-jp.sinet.ad.jp(*)
- To allocate the payload for ‘more’ IPv6 glue
- To simplify the relation of delegation
 - “dns.jp” zone itself is now delegated to [A-F].dns.jp

E.dns.jp

- Formerly, ns.wide.ad.jp
 - Operated by WIDE Project
- Moved the physical location
 - Outside of Tokyo (Osaka area)
- Changed the IP address and AS number
 - Performed at the same time the unification of hostname
 - Provider independent (PI) address and its own AS number
 - Detached from WIDE Internet
 - Only for DNS infrastructures
 - To acquire multiple transits

E.dns.jp (cont.)

- This is a pilot case to enhance robustness of .JP DNS service
 - To provide extra redundancy to survive .JP DNS service in the case of serious disasters in Tokyo
 - Especially, preparing to the electric power crisis of the summer of this year (by the scandal of electric power company)
 - But, in Japan, this summer is very cool... ☺
 - But, serious power outage occurred in NY
 - This is an object lesson

Future plans

- We will change IP address and AS number of A.dns.jp (primary server) for ‘critical infrastructure’
 - Critical infrastructure is defined by APNIC
 - <http://www.apnic.net/info/faq/critical-infrastructure-faq.html>
 - country code TLD (ccTLDs) nameservers
- We plan to introduce anycast technology onto .JP DNS servers
 - To enhance robustness of DNS service

Related links

- Service Migration Schedule of Japanese JP Domain name
 - <http://jprs.jp/en/ace-transition.html>
- JPRS Launched IDN Standards-Compatible Japanese JP Domain Name Registration Service on July 10, 2003
 - <http://jprs.jp/en/topics/030711.html>
- E.dns.jp technical information
 - <http://e-dns-jp.wide.ad.jp/>