

The logo for nic@ir, featuring the text 'nic@ir' in a stylized, handwritten font inside a light green, cloud-like shape.The text 'IRNIC ccTLD Registry of Iran' in a white, sans-serif font, positioned to the right of the nic@ir logo. The background of the header is a teal map of the world with a grid.

14th ICANN meeting @ Vancouver/Canada

IDN developments at IRNIC .ir ccTLD

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IDN in IRNIC

- 1. 6 month testbed period started 26 Feb. 2005**
- 2. First Sunrise Period of 45 days: Limited to the registration of officially registered names by public or private institutions**
- 3. Second Sunrise Period of 15 days: Limited to participants in the Trial Period : they can register up to 15 domains including at most 5 from those they registered in Trial Period**

Testbed Report

List of 15 TLDs in the Trial Period and the number of registrations

| | |
|------------------------------|-----------------------------|
| 3134 = ایران "Iran" | 256 = سازمان "Organization" |
| 241 = آموزشی "Educational" | 400 = شخصی "Individual" |
| 160 = پزشکی "Medical" | 628 = شرکت "Company" |
| 164 = تفریحی "Entertainment" | 216 = علمی "Academic" |
| 105 = دینی "Religious" | 210 = فرهنگی "Cultural" |
| 180 = دولتی "Governmental" | 268 = فروشگاه "Shop" |
| 176 = رسا "ISP" | 209 = نشریه "Publication" |
| | 155 = ورزشی "Sport" |

6502=SUM

First Sunrise Period

- First Sunrise Period planned for 45 days
- The first Sunrise Period was to end November 6, but has been extended through December 6
- All registration is presently under the top-level domain **ایران**. (**Iran**)

Second Sunrise Period

- Second Sunrise Period of 15 days
- Limited to participants in the Trial Period
- They can register up to 15 domains including at most 5 from those they registered in the Trial Period

The logo for nic@ir, featuring the text 'nic@ir' in a stylized, lowercase font. The 'i' and 'r' are connected to the '@' symbol. The logo is set against a dark green background with a faint world map.

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Registration software

- Software developed at IRNIC
- Registration is in IDN
- Persian IDN is based on Persian (Farsi) script, a variant of Arabic alphabet
- To combat confusion with Arabic and other Arabic-based scripts and combat phishing attempts, a bundle system is used

Label Processing

- Checking the format and characters against character table
- Normalizing the domain into Standard Persian label
- Removing ZWJ and NZWJ characters
- Generating the exact IMAGE of the registered domain to make the applicant aware of the domain actually being registered
- If the applicant trying to register کلمه ۴ای.ایران with ARABIC YEH, the generated image will be

کلمه ۴ای

which is the domain in normalized format
(PERSIAN YEH)

Label Processing

- Upon confirmation, the domain and all its punycode variants are registered as a bundle
- The normalized label and its exact punycode are the primary keys in the database

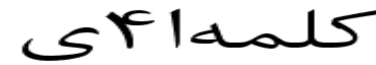
Input label

کلمه‌ای

Normalized label

کلمه‌ای

Generating Image



Simple label

کلمه‌ای

Unicode Bundle

کلمه‌ای، کلمه‌ای، کلمه‌ای،
کلمه‌ای، کلمه‌ای، کلمه‌ای

Punycode Bundle

xn--mgb1ddi10c2gjk
xn--mgb9cdekt30j
xn--4-ymc0gek99c0h
xn--4-ymc7fefmx
xn--mgb1ddi0m8p7h
xn--mgb9cdekt5p

Unicode Bundle

کلمه‌ای، کلمه‌ای، کلمه‌ای،
کلمه‌ای، کلمه‌ای، کلمه‌ای

X

Top level

ایران. "PERSIAN YEH"
ایران. "ARABIC YEH"

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We don't want to display All Variants !!

12 records should be written to the zone file to support all variants

Helping IDN Customers

- It was evident during the Trial Period that we should not expect the average IDN applicant/user to be familiar with concepts such as normalized label, simple label, UNICODE label, punycode label, ...
- Sending an email containing complete details of configuration and zone template of the BIND DNS server for the entire bundle
- Web interface is also being developed to assist in this procedure <http://idn.nic.ir/bind/>

The Next Step(Hopefully) Supporting IDN.IDN

The Persian script is right-to-left and having a *.ir* on the right creates visual confusion and appearance of dns-hierarchy contradiction. For this reason we are firm supporters of IDN.IDN concept

- Ironically, in the case of our top level domain **ایران** (Iran in Arabic script) , implementation of IDN.IDN would require the use of a bundle if our algorithm is followed. The bundle would contain

The Next Step(Hopefully) Supporting IDN.IDN

- `<xn--mgb3a4f16a>` “ایران” with
PERSIAN YEH “ی”
- `<xn--mgb3a4fra>` “ایران” with
ARABIC YEH “ي”

nic@ir

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Visit : <http://ثبتدامنه.ایران.ir>
(<http://www.nic.ir>)

Thank You
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