The Use of Arabic Script in the Internet Addressing System

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Internet Demography is Changing

Internet users 2.2 billion

Chinese Internet users reached 440 million (about 22% of total internet users)

Growing Arabic Internet users (+65 million)

The Majority of Internet next billion users will be non–English Speaking
# Domain Names System “DNS”

<table>
<thead>
<tr>
<th>Current Internet Domain Names System</th>
<th>ASCII “English” Generic Top Level Domains</th>
<th>name.com</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ASCII “English” Generic Top Level Country Codes</td>
<td>name.QA name.com.QA</td>
</tr>
<tr>
<td>New Internationalized Domain Names System</td>
<td>Domain Names in Arabic, Chinese, Cyrillic</td>
<td>مواعيد.مصر.موري</td>
</tr>
<tr>
<td></td>
<td></td>
<td>مواعيد.السعودية.مصر.موري</td>
</tr>
<tr>
<td></td>
<td></td>
<td>مواعيد.امارات.قطر.موري</td>
</tr>
</tbody>
</table>

- Qatar is 4th Country in the World to get an IDN (Arabic) Domain
What Are Qatar Domain Names

.QA

.قطر
Arabic Domain Names

• More than 10 Delegated Arabic IDN ccTLD strings in the root
  ( Egypt, Saudi Arabia, Emirates, Qatar, Jordan, Tunis, Morocco, Algeria, Syria, Palestine )

• IDN registrations service launched ( Saudi Arabia, Emirates, Qatar, Jordan, Tunis )

• High expectations for the launch of Arabic domain names

• Arabic IDN ccTLD Implementation Challenges :
  – Linguistic
  – Technical
  – Research and Development
Linguistic Challenges

- The Arabic language and Arabic script are rich and complex, written right to left

- One Script, Different Languages (Arabic, Farsi, Urdu,…etc)

- Arabic language comprises 28 letter - (أبجدحبردمثلنوكقفسغعظطضصشز)

- Many of the letters have various shapes

- Use of abstractions and abbreviations for example like UK, UN is not common in Arabic

- Characters may have more than one shape in accordance to its position in word, in the beginning, middle and end of the word

- 2 groups of digits format used, both written from the left to right with the same reference yet they have different codes in the Unicode Arabic characters sets:

  Eastern numerals (currently called Arabic-Indic numerals).
  They are the most widely used in the Arabic countries (٩،٨،٧،٦،٥،٤،٣،٢،١،٠)

  Moroccan numerals (currently called Arabic numerals). They are widely used in the northwest of Africa (especially in Morocco, Algeria, Tunisia) (٠،١،٢،٣،٤،٥،٦،٧،٨،٩)
Technical Challenges

- Registry Systems support of Arabic IDN
- Language tables (Common Arabic Script table Vs Different Arabic Script Language tables)
- Variants Issue:

<table>
<thead>
<tr>
<th>Unicode Code Point</th>
<th>Unicode Name</th>
<th>Character</th>
<th>Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>U+0629</td>
<td>Arabic Letter TEH MARBUTA</td>
<td>ة</td>
<td>قطر.قطرنة.قطرة</td>
</tr>
<tr>
<td>U+0647</td>
<td>Arabic Letter HEH</td>
<td>ه</td>
<td>قطر.قطرنة.قطرة</td>
</tr>
</tbody>
</table>

- Bundling Vs Non-Bundling
Search Engines & Applications

- IDN Email (RFC under development in IETF)
- Social Media networks (e.g. Twitter and Facebook)
- Browsers in Mobile Devices or Tablets
Source: Qatar Domains Registry System
Data until Last week of December 2011
Try a Domain NOW
- + 200 Registered Arabic Domain Names
Making more visible
QATAR ARABIC DOMAIN NAMES CHALLENGES

- Population, Demography and Market Size
- Highly Educated Internet users, comfortable using English language
- Applications and Software Support (Usability of the Arabic domains)
Solutions

- Joint Research Projects (Academia and Technical)
  e.g. Global Acceptance of new Top Level Domains in collaboration with ICANN (Focusing on Arabic Script)

- Proactive in resolving issues of Usability/Application Support of Arabic Domains

- Marketing and Awareness

- Innovations and Entrepreneurship
Thank You

Qatar Domains Registry
www.domains.qa