Enabling a Multilingual Internet

Imagine if, every time you wanted to visit a website, you were expected to type in letters from a language you did not speak.

For more than a billion web users, this experience is all too familiar.

The Internet was designed to be global, but it was not designed to 안녕하세요 be multilingual. This limitation has been most evident in website addresses, which for years permitted only a small set of Latin characters.

To enable multilingual website addresses, ICANN and community stakeholder groups have worked over the past decade to enable the support of internationalized domain names (IDNs).

Introducing IDNs

IDNs are domain names that include characters other than the letters of the basic Latin alphabet (the 26 letters "a-z"), numbers 0-9, and hyphen "-". Such domain names could contain characters with diacritical marks as required by many European languages, or characters from non-Latin scripts, such as Arabic or Chinese.

Before IDNs were rolled out on a large scale, you might have



Helô ICANN & IDNs

seen non-Latin characters only at the second, third or even fourth level of a URL.

However, for IDNs to truly be user friendly, URLs need to support a script across all levels. Which is why ICANN has begun introducing IDNs into the top level, known as the root zone.

IDNs in the root zone

Γεια σας IDNs were first introduced into the root zone in 2010 as countries began supporting IDN country code top-level domains (IDN ccTLDs). Today, more than 30 IDN ccTLDs have been delegated, including:

- Qatar (qa): قطر
- Hong Kong (hk): 香港
- Thailand (th): ไทย
- Russian Federation (ru): pφ



Today, Russians are no longer restricted to registering domains using the Latin (.ru) country code and may instead use the Cyrillic equivalent .pd.

Evidence of these new URLs are becoming more visible. Russian search engine Yandex can be located at <u>http://Яндекс.pф</u>, and the address of Russia's largest mobile carrier is <u>http://MTC.pф</u>.

These addresses are fully functional, and modern web browsers support them. For a complete list of approved and delegated IDN ccTLDs, visit: <u>www.</u> icann.org/en/resources/idn/fast-track/string-evaluation-completion.

Beyond country codes: IDN gTLDs

ICANN is in the process of delegating a new wave of top-level domains known as generic TLDs (gTLDs). More than a thousand applications have already been filed for these new domains, including more than a hundred IDN gTLDs. To view the full list of applied-for gTLDs visit: <u>http://</u> newgtlds.icann.org.

Managing IDN "variants"

IDNs can serve as powerful tools for broadening the Internet's capacity and accessibility; however, they also raise unique issues. One such issue concerns "variants," which, according to one technical definition, occur when a single conceptual character can be identified with two or more different Unicode code points with graphic representations that may be visually similar. For example, a string in traditional Chinese commonly has an equivalent simplified Chinese, such as 中国 and 中國.

To support IDN variants in the root zone, the ICANN community, at the direction of the Board, undertook several projects to study and make recommendations on their viability, sustainability and delegation.

In April 2013 the Board adopted a resolution directing staff to implement the Procedure to Develop and Maintain the Label Generation Rules for the Root Zone in Respect of IDNA Labels. To learn more, visit: www.icann.org/en/resources/idn/variant-tlds.

IDNs and the next billion Internet users

There are now more than 2.7 billion Internet users, the majority of whom rely on non-Latin scripts. Looking ahead at the next billion Internet users, the regions representing the highest expected growth in Internet usage over the next decade, will directly benefit from IDNs.

As IDNs become better supported and promoted, we will continue to move to a

more linguistically user friendly Internet, in which web users around the world are able to surf the Internet entirely in their native languages.



About ICANN

The Internet Corporation for Assigned Names and Numbers (ICANN) was formed in 1998 to coordinate the Internet's unique identifiers around the world. Without that coordination we wouldn't have one global Internet.

ICANN is a not-for-profit, public-benefit corporation with participants from all over the world dedicated to keeping the Internet secure, stable and interoperable. It promotes competition and develops policy on the Internet's unique identifiers.

To Learn More

Visit IDN resources at ICANN:

www.icann.org/en/resources/idn