KISA’s efforts on improving the usability of IDNs

September, 2013
History of KISA

KISA
Korea Internet & Security Agency

Korea Information Security Agency (Jul. 2001)

NIDA
National Internet Development Agency of Korea (Jul. 2004)
Korea Network Information Center, KRNIC (Jun. 1996)

KIICA
Korea IT International Cooperation Agency (Jan. 2007)
Foundation of KISA

Purpose of Establishment

KISA (Korea Internet & Security Agency) is a government-affiliated institute established by the Ministry of Science & ICT & Future Planning (MSIP) to enhance the quality of information network and security and to support international cooperation and facilitate access to foreign market, in accordance with the following law.

Legislation

Act on Promotion of Information and Communications Network Utilization and Information Protection, etc.

Article 52 (Korea Internet and Security Agency)
The Government shall establish the Korea Internet and Security Agency to upgrade the information and communications network (excluding matters concerning establishment, improvement and management of information and telecommunications network), encourage the safe use thereof, and promote the international cooperation and advancement into the overseas market in relation to broadcasting and communications.

Act on Internet Address Resources

Article 2 (Definitions)
The term “internet address management organizations” means the Korea Internet and Security agency under Article 52 of the Act on Promotion of Information and Communications Network Utilization and information Protection, etc. which performs duties related to the assignment and registration, etc. of Internet addresses, and any corporation or organization entrusted with duties of managing Internet addresses by the Internet & Security Agency.
General Information of KISA

General Status

Number of workers: 579
(2 offices, 2 groups, 1 center,
10 divisions, 46 teams)

Budget: US$ 123 million
(KRW 135.3 billion)

(As of Jan. 2013)

Internet Address
Management (KRNIC)

Main Activities

Information Communication
Infrastructure Protection

Internet Ethics

Fostering Internet & Knowledge
Information Protection Industry

Exporting & International
Cooperation regarding
 Broadcasting Communication

Internet Incident Response
(KrCERT/CC)

Personal Information
Protection

Internet Policies
Planning

118 Hotline Service
(Consulting about Personal
information infringement, Illegal
spam, Hacking/virus, and Internet)
Table of Contents

- Introduction of .hanguk
- Efforts on Improving the Usability of .hanguk
**Overview**

- KISA submits IDN ccTLD fast-track request to ICANN (Nov, 2009)
- KISA passes ICANN’s string evaluation & submits delegation request to ICANN (May, 2010)
- KISA passes ICANN’s string delegation process and becomes the registry of .한국 (.Hanguk) (Feb, 2011)
- KISA finalizes registration policy of .한국 (.Hanguk) (Mar, 2011)
- KISA launches .한국 (.Hanguk) (May, 2011 ~)

**Structure of .한국 (Hanguk)**

- IDN.IDN (Registrants are allowed to register IDN directly in second level)

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**Sunrise Period: May. 2011 ~ Oct. 2011**

- **Government Bodies and Public Organizations**
  (6,240, As of Mar.1, 2012)
  - 1 official name and 1 abbreviated name of the organization
- **Trademark Holders**
  (2,803, As of Mar. 1, 2012)
  - 1 domain name per trademark

- **Landrush**
  (119,957, As of Mar. 1, 2012)

- **FCFS**

  - **May 25, 2011**
  - **August 16, 2011**
  - **October 4, 2011**
### Korean ccTLDs: .kr & 한국 (Hanguk)

<table>
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<tr>
<th>Structures</th>
<th>2nd Level .kr</th>
<th>3rd Level .kr (ASCII)</th>
<th>.한국 (IDN)</th>
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<tr>
<td><strong>Examples</strong></td>
<td>IDN(Korean).kr</td>
<td>ASCII.kr</td>
<td>한국 (IDN)</td>
</tr>
<tr>
<td>도메인.kr</td>
<td>domain.kr</td>
<td>kisa.or.kr</td>
<td>인터넷진흥원.한국</td>
</tr>
<tr>
<td><strong>Available Strings</strong></td>
<td>Unicode Hanguel Characters, Latin Alphabet, Digits[0~9], hyphen [-]</td>
<td>Latin Alphabet, Digits[0~9], Hyphen [-]</td>
<td>Unicode Hanguel Characters, Latin Alphabet, Digits[0~9], Hyphen [-]</td>
</tr>
<tr>
<td><strong>Length</strong></td>
<td>shall contain a minimum of 2 characters and a maximum of 17 characters</td>
<td>shall contain a minimum of 3 characters and a maximum of 63 characters</td>
<td>shall contain a minimum of 1 character and a maximum of 17 characters</td>
</tr>
<tr>
<td>* More than 1 Hanguel must be included</td>
<td>* More than 1 Hanguel must be included</td>
<td>* More than 1 Hanguel must be included</td>
<td></td>
</tr>
<tr>
<td><strong>Others</strong></td>
<td>A domain name shall not begin or end with a hyphen. Consecutive hyphens are not allowed between the third and the fourth characters.</td>
<td></td>
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</tr>
</tbody>
</table>

### Registration Requirement: Local Presence required

### Registration Channel: KISA Accredited Registrars

### Registration Period: 1 to 10 years

### Registration Fee (VAT incl.)

- (1999) KW33,000 (US$30)
- (2001) KW22,000 (US$20)
- (2002): KW15,400 (US$14)
- (2007) KW10,450 (US$10)
Introduction of .한국 : Registration Trend

Number of Domains Names (.kr + .hanguk)

- Aug. 19, 2003: Start of 'Hangul.kr' service
- Sep. 18, 2006: Start of the 2nd level .kr domain service
- May 25, 2011: Start of '.한국 (.Hanguk)' service

Chart showing the number of domain names from 2000 to 2012:
- 2000: 517,354
- 2001: 457,450
- 2002: 512,200
- 2003: 611,548
- 2004: 590,800
- 2005: 642,770
- 2006: 705,775
- 2007: 930,485
- 2008: 1,001,206
- 2009: 1,064,179
- 2010: 1,076,899
- 2011: 1,299,089
- 2012: 1,191,531

Sharp Decrease due to low renewal rate from 2011 onwards.
Improving the usability of .한국 : Current Status

<table>
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<th>IDN Usage Environment - by Category</th>
<th>Findings</th>
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<tr>
<td>PC</td>
<td></td>
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<tr>
<td>IE7, IE8, IE9, Chrome, Opera, Safari</td>
<td>OK</td>
</tr>
<tr>
<td>Mozilla Firefox</td>
<td>OK, but shows Punycode version of IDN(XN--)</td>
</tr>
<tr>
<td>Safari, Opera</td>
<td>OK</td>
</tr>
<tr>
<td>Mobile</td>
<td></td>
</tr>
<tr>
<td>Android</td>
<td>OK, but shows Punycode version of IDN(XN--)</td>
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<tr>
<td>Mobile Internet Explorer</td>
<td>Doesn’t support IDNs</td>
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<tr>
<td><strong>Application Programs</strong></td>
<td></td>
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<tr>
<td>PC</td>
<td></td>
</tr>
<tr>
<td>outlook 2010</td>
<td>Provides automated link for IDNs</td>
</tr>
<tr>
<td>MSWord/PPT/Excel</td>
<td>Provides automated link for IDNs</td>
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<tr>
<td>Mobile</td>
<td></td>
</tr>
<tr>
<td>iOS</td>
<td>Provides IDN link</td>
</tr>
<tr>
<td>Android</td>
<td>Doesn’t provide IDN link</td>
</tr>
<tr>
<td><strong>Online Search-Engine Advertisement</strong></td>
<td></td>
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<tr>
<td>NBP(naver business platform)</td>
<td>Service Available</td>
</tr>
<tr>
<td>Overture</td>
<td>Service Not Available</td>
</tr>
</tbody>
</table>
Co-Work with Application Developers, Mobile-Phone manufacturers, Portal Sites and etc, to improve the usability of .한국

(2011) Meetings with Yahoo, Google, MS, Overture, Naver, Daum, Nate and relevant associations to promote cooperation on improving the usability of .한국 (‘11. 10 ~ ‘11.12)
- Global companies such as Google, MS and Overture were not so cooperative due to their internal policy, but some were planning to enhance the usability of IDNs on their next version

(2012) KISA promoted int’l cooperation with relevant stakeholders(application developers, mobile-phone manufacturers etc) to improve the usage environment of .한국
Improving the usability of .한국 – KISA’s Efforts

.한국 Promotion : 2013 Activities and Plans

- Press Release, Online Ads, Subway and Bus Ads (May ~ Dec)
- Campaign to promote the use of .한국 domain name for public service homepages with the cooperation of public organizations
- Joint Marketing with accredited registrars(30) to promote the use of .한국 (price reduction etc)

< .한국 Campaign in front of King Sejong Statue wearing traditional scholar costumes (8.19)>
Thank you
Usage Rate of Web-browsers: Korea vs World-wide

Korea
- IE: 81.07%
- Chrome: 11.28%
- Firefox: 4.85%
- Opera: 0.25%
- Safari: 2.06%
- Etc: 0.49%

World-wide
- IE: 38.54%
- Chrome: 27.13%
- Firefox: 25.5%
- Safari: 6.15%
- Opera: 1.96%
- Etc: 0.71%