IDN @ LKNIC
IDN Implementation, Policies and Issues

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IDN History in Sri Lanka

- ICANN Identified the requirement of IDN
- Proposed deployment plan
  - IDN Fast track for the countries which need IDN urgently
- Sri Lanka selected IDN fast track Implementation
  - ICTA played the main role
  - They formed an IDN Task force with LKNIC, TRC, Department of Official languages ISPs in Late 2008
IDN History ...

• The Task force proposed 2 IDN ccTLDs .ලංකා and .இலங்கை.
  • 2 Domains were officially published at the e-Asia conference in 2\textsuperscript{nd} December 2009.

• March 2010 - IDN strings were accepted ICANN as valid IDN strings.

• 14\textsuperscript{th} May 2010 – IDN delegation request were submitted to IANA.
IDN History ...

- LKNIC officially launched IDN domain registration in 28th June 2010 at the LKNIC 20th Anniversary registering මහා.ලංකා / අර්කුණලංකා.

- July 2010 - Zones were signed with NSEC Algorithm

- August 18th 2010 - root servers were configured with .ලංකා and .இலங்கை
Our Achievements

• Sri Lanka is the First country with 2 IDN ccTLDs
  • Currently only 15 IDN ccTLDs are delegated at the root zone
• We have enabled DNSSEC in IDN ccTLD as well
• Online domain request mechanism
Policies of Registering IDN domains in LKNIC

• Sunrise Period (till 31st Dec 2010)
  • Existing .lk domain name registrants to register the respective Sinhala and Tamil domain names
  • Such registrations will be free of charge, and will expire concurrently with the .lk domain name
  • The Sinhala and Tamil strings should be derivable from the existing .lk domain name by transliteration or pronunciation.
  • Example
    – www.holiday.lk → දිනි.ිතිලියිඩි.ලංකා
  • Only one Sinhala and one Tamil domain name may be registered for each .lk registration, even if multiple transliterations, etc. are possible
Registrations after the Sunrise Period

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- Each domain name registration may comprise one name in English, Sinhala and Tamil in the .lk, ලංකා and .இலங்கை domains, or sub-domains thereof, respectively

- Registrations shall be made on a first-come first-served basis
Restrictions and Limitations

- All Sinhala and Tamil domain names must be valid Unicode sequence
  - Only modifiers will NOT be considered as a valid domain name
  - Spell check is NOT applied
- Domain names should consist only of
  - Sinhala (for ලංකා) OR Tamil (for இலங்கை) characters,
  - Digits 0-9
  - Letters a-z
  - hyphen-minus and zero-width joiner/non-joiner characters

Not allowing Tamil and Sinhala Letters in one domain name
Restrictions and Limitations...

- Following domain names will not be registered:
  - Names that may be obscene or offensive to any accepted religion, race, culture or tradition of Sri Lanka.
  - Names which may indicate the name of the country or the government (without specific authorisation), or may in any other way mislead the public.
Restrictions and Limitations ...

• Following domain names will not be registered

  Tamil OM
  Tamil AU length mark
  Tamil Digits Zero - Nine
  Tamil Sign Anuswara
  Tamil numbers Ten, Hundred, Thousand
  Tamil Symbols: Day, Month, Year, Debit, Credit, Rupee and Number signs.
  Sinhala letters iluyanna and iluuyanna
  Sinhala letter sanyaka jayanna
  Sinhala vowel signs gayanukitta and diga gayanukitta
  Sinhala punctuation kunddaliya
  Proposed Sinhala numerals
ZWJ/ZWNJ

- ZWJ combinations are Allowed but the Applicants are warned
- Due to the zwj Issue, the browsers(IDNA2003) interprets a domain with a zwj in its label differently
- i.e
  - ලංජී → xn--c0c2cb5dxa631z
  - ලංජය → xn--c0c2cb5dxa
  - ලංජී → ෂ් + 0DA2+0DCA +200D +0DBA
  - ලංජය → ෂ් + 0DA2+0DCA + 0DBA
Observations / Suggestions

• Defining domain names
  - As acronyms are commonly use to identify institutes etc. IDN with English labels are used
    - The Information and Communication Technology Agency of Sri Lanka is well known with acronym ICTA
    - It users icta.lk and suggested icta.lk and icta.

• Suggesting Labels for www
  - www → විද්‍යාසාලය
    - www.nic.lk → විද්‍යාසාලයේෂශ්‍රී.ලංකා
Issues

- Motivation is less → 1% of the .lk domains currently registered under IDN ccTLD
- Less Awareness of the Internet community
  - Technical
  - Marketing
- Issues with defining IDN domains
  - Institutions are commonly known by their English abbreviations and their domains are also use abbreviations
    - APTLD, BIT (www.bit.lk), ICTA (www.icta.k)
Thank You!