What are IDNs and what does it mean to you?

In collaboration with the APRALO Capacity Building Webinar Series
9 April 2015
Webinar Information - Agenda

Introduction by Jia-Rong
• APAC Webinar (Second Thursday Bi-monthly)
Remarks by Siranush, APRALO Chair
Presentation by Sarmad
• What are Internationalized Domain Names?
• IDN Work at ICANN
• Why and how you can get involved
Sharing by APRALO representative Edmon
• What does IDN mean to you?
• IDN from the Label Generation Ruleset (LGR) panel perspective
Q&A
Webinar Information

Dial-in Numbers: http://tinyurl.com/APACdial-in
Conference ID: 645 127 3995
In order to ask a question, you will either have to dial into the audio bridge (dial in details above) or type it in the Adobe Connect chat.

Q&A Session after the presentation:
• Questions submitted to ICANN prior to the webinar given priority
• Questions will be answered as time permits

Recordings & slides available after the webinar:
http://tinyurl.com/APACWebinars
Questions & Answers

Questions will be answered as time permits
• Questions not answered during the session will be posted on wiki page

Adobe Connect questions
• Send your question via the Q&A Pod

Phone questions
• Dial *6 (star six) to unmute the line

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Post-webinar survey
Introduction to APRALO Capacity Building Webinar Series
by Siranush Vardanyan
APRALO Chair
What are Internationalized Domain Names (IDNs)?

IDN work at ICANN

Why and how you can get involved
What are Internationalized Domain Names (IDNs)?
ASCII Domain Name Label

**www.cafe.com**

- Third Level Domain
- Second Level Domain
- Top Level Domain (TLD)

**Forming ASCII Labels**

Use LDH
- Letters [a-z]
- Digits [0-9]
- Hyphen (LDH)

Label length = 63

Other constraints (e.g. on hyphen)

**Forming ASCII Labels**

Use only Letters
- Letters [a-z]

Label length = 63
Internationalized Domain Name (IDN) Labels

Syntax of IDN Labels

Valid U-Label: Unicode code points as constrained by IDNA2008

Valid A-Label - “xn--” followed by punycode of U-Label of length 59

Syntax of IDN Labels

Valid U-Label, further constrained by the “letter” principle for TLDs

Valid A-Label
IDN Program @ ICANN

- IDNs at Top Level
  - IDN TLD Program
    - Label Generation Ruleset (LGR)
    - LGR Toolset
    - IDN Variant Implementation
  - IDN ccTLD Fast Track Process Implementation
- IDNs at Second Level for gTLDs
  - IDN Implementation Guidelines
  - IDN Tables
- Community Outreach and Involvement
IDN TLD Program
IDN TLD Program

Case Studies:
- Arabic
- Chinese
- Cyrillic
- Devanagari
- Greek
- Latin

PHASE 1 (2011)

Community agreed to define a Label Generation Rules (LGR)

Integrated Issues Report

PHASE 2 (2011-12)

Projects:
- P1 LGR XML Specification
- P2.1 LGR Process for the Root Zone
- P6 User Experience Study for TLD Variants

PHASE 3 (2012-13)

Projects:
- P1 LGR Specs. and Toolset
- P2.2 LGR Development
- P7 LGR Implementation

PHASE 4 (Since 2013)

Reports and documentation of all completed projects available at:
https://www.icann.org/resources/pages/reports-2013-04-03-en
Label Generation Rules (LGR) for Root Zone

For each script or writing system, for the Root Zone:

1. Which code points are valid for use?
2. Are any of these code points variants of each other?
3. Are there any additional constraints on the labels?

For the Root Zone, single “table” containing data for all scripts

- Must be conservative, consistent and secure
- Designed at script level
Root LGR by Generation and Integration Panels

Label Generation Ruleset (LGR)

<table>
<thead>
<tr>
<th>Generation Panel Status</th>
<th>Arabic</th>
<th>Armenian</th>
<th>Chinese</th>
<th>Cyrillic</th>
<th>Greek</th>
<th>Japanese</th>
<th>Khmer</th>
<th>Korean</th>
<th>Latin</th>
<th>Myanmar</th>
<th>Neo-Brahmi</th>
<th>Sinhala</th>
<th>Tibetan</th>
<th>Other</th>
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</thead>
<tbody>
<tr>
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</tbody>
</table>

Maximal Starting Repertoire (MSR)
LGR Specification and Toolset


- Toolset functional priority
  - Create LGR
  - Use LGR
  - Manage LGRs

- Open source
IDN ccTLD Fast Track Process Implementation
IDN ccTLD Fast Track Process

ccTLDs: 46/36*

* Successfully evaluated IDN ccTLDs/Total countries/territories
IDNs at Second Level for gTLDs
IDN Impl. Guidelines for the Second Level

- IDN registration policies and practices at the second level
  - Designed to minimize the risk or confusion for the consumer
  - Respect the interests of local languages and character sets

- Last updated in 2011: Version 3.0
  - New IDN terminology due to IDN Variant TLD projects
  - Consistent, machine readable format for language tables
  - Updated content: IANA IDNA table with Unicode versions, MSR, LGR
  - Additional guidelines: informational RFC 6912, IDN TLD Variants User Experience study

- GNSO community at ICANN asked to initiate review
  - Current status – initiating next revision
IDN Tables for the Second Level

- IDN Tables submitted by new gTLDs intending to offer IDNs at second level
  - Varied in the character repertoire and contextual rules
- Develop reference Label Generation Rulesets (LGRs) for facilitation and consistency in Pre-Delegation Testing (PDT) and the Registry Service Evaluation Process (RSEP)
- Promote reuse for secure and consistent end-user experience
IDN Program sessions at ICANN meetings

IDN Program updates to SOs/ACs at ICANN meetings

Presentations at meetings
- APTLD, APrIGF, ArabIGF, IGFs, TLDCON, AFRINIC, RIPE NCC

Email communication to SOs/ACs – call to action

Blog for general community:
http://blog.apnic.net/2014/09/30/speak-up-for-your-language/

IDN pages at ICANN Community Wiki and ICANN Website

IDN mailing lists
- {vip, lgr, ArabicGP, ArmenianGP, ChineseGP, …}@icann.org
Summary of IDN Program @ ICANN

- IDNs at Top Level
  - IDN TLD Program
    - Label Generation Ruleset (LGR)
    - LGR Toolset
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- Community Outreach and Involvement
Get Involved:
Speak up for your language
How to get involved?

Volunteer for your script Generation Panel (GP)
To contribute expertise, contribute to the GP for your script. You can get involved by simply emailing your CV and a brief statement of interest to idntlds@icann.org

Review work through public comments
Sign up for the IDN mailing list vip@icann.org (to sign up, visit https://mm.icann.org/listinfo/vip) and participated in the review of IDN work being done at ICANN through the public comments

Keep yourself updated
Attend regular IDN Program Update sessions at ICANN meetings and sign up on the IDN mailing list vip@icann.org to get updates on the IDN Program at ICANN
Sharing of IDN from the Label Generation Ruleset (LGR) panel perspective

by EDMON CHUNG
APRALO Representative and At-Large IDN Policy Working Group Co-Chair
Useful Links for IDN Program @ ICANN

- To join a Generation Panel for your language, submit CV and statement of interest at: idntlds@icann.org; Call for Generation Panels: http://www.icann.org/en/news/announcements/announcement-11jul13-en.htm
- LGR Document Repository: https://community.icann.org/display/croscomlgrprocedure/Document+Repository
- Community Wiki for LGR Project: https://community.icann.org/display/croscomlgrprocedure/Root+Zone+LGR+Project
- IDN Implementation Guidelines: https://www.icann.org/resources/pages/implementation-guidelines-2012-02-25-en
Engage with ICANN

Thank You and Questions
Reach us at: Sarmad Hussain or APAC Hub
Email: sarmad.hussain@icann.org / apachub@icann.org
Website: icann.org

twitter.com/icann
gplus.to/icann
facebook.com/icannorg
weibo.com/ICANNorg
linkedin.com/company/icann
flickr.com/photos/icann
youtube.com/user/icannnews
slideshare.net/icannpresentations
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Thank you!