Call for collaboration of IDN TLD Evaluation

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Overview

- IDN TLD Evaluation of ICANN has begun on 15 Oct 2007
  - http://idn.icann.org/
- This evaluation is a community based activity
  - Our (Registries, Software vendors, …) cooperation is essential
- Major purpose of the evaluation is to accumulate experiences about behaviors of applications, such as:
  - This application behaves as expected
  - This application doesn't cause damage to the Internet
  - Etc.

  … but how do we assess them?
- Having common criteria for the application evaluation is essential to accumulate experiences effectively
  - Why don't we share such criteria among us?

The example.test names

IDN	Script	Language
http://مثال.إختبار	Arabic	Arabic
http://例子.测试	Simplified Chinese	Chinese
http://例子.測試	Traditional Chinese	Chinese
http://παράδειγμα.δοκιμή	Greek	Greek
http://उदाहरण.परीक्षा	Devanagari	Hindi
http://例え.テスト	Kanji, Hiragana, Katakana	Japanese
http://실례.테스트	Hangul	Korean
http://مثال.آزمایشی	Perso-Arabic	Persian
http://пример.испытание	Cyrillic	Russian
http://உதாரணம்.பரிட்சை	Tamil	Tamil
http://בײַשפּיל.טעסט	Hebrew	Yiddish

How can we collaborate?

- Share common criteria for the application evaluation
  - For wider coverage and efficiency
- Share common test scenario and check list
  - For accumulating experiences in normalized form
  - URI (IRI) used in the test is localized
- Ask communities to join this activity
  - To get more participation from interested entities
- Leverage IDNwiki to accumulate experiences
  - As an authorized repository
- Ask vendors to improve IDN handling in applications
  - Accumulated experiences from all over the world will be recognized as ‘mass of voice’

Proposed criteria for IDN TLD Evaluation

- Targeted Application categories (in order of priority)
  - Web browsers
  - Mailers (Mail User Agents)
  - Office Applications
  - Others (if any)
- Aspects of evaluation
  - User I/F
    - Input, Access, Display, Store in preferences, etc.
    - Evaluation by users
  - Application I/F
    - External program invocation, Protocol format, etc.
    - Evaluation by application vendors and experts
- Test Scenarios and data
  - Simulate usual users' behavior for each application category
  - Simple scenarios and data should be enough
- Check Lists
  - Simple format for test results of each scenario
  - Large portion is common to every language but some portion is specific to a language

Eg1. Web browsers

- Scenario example
  (1) A user types IDN on address line and try access
    – U-label with and without http://
    – A-lavel with and without http://
  (2) A user clicks IDN link on the page and try access
    – Anchor is U-label
    – Anchor is A-label
  (3) A user saves the IDN link to bookmark, clicks the bookmark and try access
  (4) A user clicks IDN on the history and try access
- Data example
- Check List example (slide 14)

Eg2. Mailers (Mail User Agents)

- Scenario example
  (1) A user receives a message including IDN and check if linked
    - U-label in several forms (wrapped by <> or “”, or followed by white-space)
    - A-label in several forms (wrapped by <> or “”, or followed by white-space)
  (2) A user clicks IDN link and try access
    - U-label
    - A-label
  (3) A user saves Mail address including IDN to address book and send massage to the address
    - U-label
    - A-label
  (4) A user replies Mail address including IDN
    - U-label
    - A-label
- Data example
- Check List example (slide 15)

Eg3. Office Applications

- Scenario example
  (1) A user types IDN in document and check if linked
    – U-label in several forms (wrapped by <> or “”, or followed by white-space)
    – A-label in several forms (wrapped by <> or “”, or followed by white-space)
  (2) A user creates hyper-link to the IDN and check if linked
    – U-label
    – A-label
  (3) A user clicks IDN link and try access
- Data example
- Check List example (slide 16)

Eg4. Others

- Any suggestions?
  - More kinds of application
  - Scenarios
  - Check Lists

More facilities/features needed for IDN evaluation environment prepared by ICANN?

- For web browsers
  - IDN in Server Certification
  - IPv6 access (AAAA for IDN label)
  - Access log analysis of the IDN page
  - Etc.
- For mailers
  - Two or more SMTP servers for bilateral email testing
  - Flexibility for user account management
- For other applications
  - SRV and / or NAPTR setting for SIP testing

➔ Don’t we need extra servers such as DNS, HTTP and SMTP?

Proposal

- Why don't we get together to collaborate for this evaluation?
  - Creation of a mailing list
  - Cooperation in making test scenarios
  - Accumulation of test results across scripts
  - Having ICANN prepare for more relevant environment

  - Pressing application vendors toward implementation of full IDN awareness

Related Links

- Mailer guideline for clickable IDN link
  - http://nihongojp.jp/support/mail_guide/ (Japanese)
- IRI recognition in Applications
  - http://tools.ietf.org/id/draft-yoneya-iri-recognition-00.txt

Q&A

IDN conformance evaluation sheet for Web Browser

Ver0.9 21-Oct-2007

Browser Name	Mozilla Firefox
Version	2.0.0.8
Platform(OS)	WindowsXP
Evaluation Date	21-Oct-07
Evaluator	Yoshiro Yoneya
Language	Japanese
IDN Level	TLD+2LD

IDN access	access	Displayed string U-Label	Displayed string A-Label	remarks
Input from Address bar				
U-Label				
w/ http://	O	O(*1)	O(*2)	*1:OK if network.IDN.whitelist.テスト is true *2:OK by default or network.IDN.whitelist.テスト is false
w/o http://	O	O(*1)	O(*2)	the same above
A-Label				
w/ http://	O	O(*1)	O(*2)	*1:OK if network.IDN.whitelist.xn--zckzah is true *2:OK by default or network.IDN.whitelist.xn--zckzah is false
w/o http://	O	O(*1)	O(*2)	the same above
Link Click				
U-Label	O	O(*1)	O(*2)	*1:OK if network.IDN.whitelist.テスト is true *2:OK by default or network.IDN.whitelist.テスト is false
A-Label	O	O(*1)	O(*2)	*1:OK if network.IDN.whitelist.xn--zckzah is true *2:OK by default or network.IDN.whitelist.xn--zckzah is false
Bookmark Click				
U-Label	O	O(*1)	O(*2)	*1:OK if network.IDN.whitelist.テスト is true *2:OK by default or network.IDN.whitelist.テスト is false
A-Label	O	O(*1)	O(*2)	*1:OK if network.IDN.whitelist.xn--zckzah is true *2:OK by default or network.IDN.whitelist.xn--zckzah is false
History Click				
U-Label	O	O(*1)	O(*2)	*1:OK if network.IDN.whitelist.テスト is true *2:OK by default or network.IDN.whitelist.テスト is false
A-Label	O	O(*1)	O(*2)	*1:OK if network.IDN.whitelist.xn--zckzah is true *2:OK by default or network.IDN.whitelist.xn--zckzah is false

IDN storage	Stored string U-Label	Stored string A-Label	remarks
Bookmark			
U-Label	O	X	depends on displayed string
A-Label	X	O	the same above
History			
U-Label	O	X	depends on displayed string
A-Label	X	O	the same above

IDN Display	Displayed string U-Label	Displayed string A-Label	remarks
Link display in status bar			
U-Label	O(*1)	O(*2)	*1:OK if network.IDN.whitelist.テスト is true *2:OK by default or network.IDN.whitelist.テスト is false
A-Label	O(*1)	O(*2)	*1:OK if network.IDN.whitelist.xn--zckzah is true *2:OK by default or network.IDN.whitelist.xn--zckzah is false
Mixed Un-related scripts			
U-Label	O(*1)	O(*2)	*1:OK if network.IDN.whitelist.テスト is true *2:OK by default or network.IDN.whitelist.テスト is false
A-Label	O(*1)	O(*2)	*1:OK if network.IDN.whitelist.xn--zckzah is true *2:OK by default or network.IDN.whitelist.xn--zckzah is false
Common Name in Certificate			
U-Label	O	X	
A-Label	X	O	
Domain Name in Certificate			
A-Label	X	O	

IDN conformance evaluation sheet for Mailer (Mail User Agent)

Ver0.9 21-Oct-2007

Mailer Name	Mozilla Thunderbird
Version	2.0.0.6
Platform(OS)	WindowsXP
Evaluation Date	21-Oct-07
Evaluator	Yoshiro Yoneya
Language	Japanese
IDN Level	TLD+2LD

IDN access	access	Passed string U-Label	Passed string A-Label	remarks
URL is wrapped with <> or ""				
U-Label				
<>	O(*1)	O(*2)	O(*3)	*1:OK if network.enableIDN is true *2:OK if network.IDN.whitelist.テスト is true *3:OK by default or network.IDN.whitelist.テスト is false
""	O(*1)	O(*2)	O(*3)	*1:OK if network.enableIDN is true *2:OK if network.IDN.whitelist.テスト is true *3:OK by default or network.IDN.whitelist.テスト is false
A-Label				
<>	O(*1)	O(*2)	O(*3)	*1:OK if network.enableIDN is true *2:OK if network.IDN.whitelist.xn--zckzah is true (http/https) *3:OK by default or network.IDN.whitelist.xn--zckzah is false
""	O(*1)	O(*2)	O(*3)	*1:OK if network.enableIDN is true *2:OK if network.IDN.whitelist.xn--zckzah is true (http/https) *3:OK by default or network.IDN.whitelist.xn--zckzah is false
URL is followed by White-Space				
U-Label	O(*1)	O(*2)	O(*3)	*1:OK if network.enableIDN is true *2:OK if network.IDN.whitelist.テスト is true *3:OK by default or network.IDN.whitelist.テスト is false
A-Label	O(*1)	O(*2)	O(*3)	*1:OK if network.enableIDN is true *2:OK if network.IDN.whitelist.xn--zckzah is true (http/https) *3:OK by default or network.IDN.whitelist.xn--zckzah is false
line of URL only				
U-Label	O(*1)	O(*2)	O(*3)	*1:OK if network.enableIDN is true *2:OK if network.IDN.whitelist.テスト is true *3:OK by default or network.IDN.whitelist.テスト is false
A-Label	O(*1)	O(*2)	O(*3)	*1:OK if network.enableIDN is true *2:OK if network.IDN.whitelist.xn--zckzah is true (http/https) *3:OK by default or network.IDN.whitelist.xn--zckzah is false

IDN access	access	Passed string U-Label	Passed string A-Label	remarks
IDN is wrapped with <> or ""				
U-Label				
<>	X			
""	X			
A-Label				
<>	X			
""	X			
IDN is wrapped with White-Space				
U-Label	X			
A-Label	X			
line of IDN only				
U-Label	X			
A-Label	X			

IDN storage	Stored string U-Label	Stored string A-Label	remarks
Addressbook			
U-Label	X	X	Stored string is %-encoding
A-Label	X	O	

IDN Display	Displayed string U-Label	Displayed string A-Label	remarks
IDN in message header			
A-Label	X	O	
IDN in message body			
U-Label	O	X	
A-Label	X	O	

IDN in Email Addresses	Passed string U-Label	Passed string A-Label	SMTP remarks
IDN in Sender address(es)			
U-Label	X	X	Passed string is UTF-8
A-Label	X	O	
IDN in Receipient address(es)			
U-Label	-	-	not tested
A-Label	X	O	

IDN conformance evaluation sheet for Office Application

Ver0.9 21-Oct-2007

Application Name	
Version	
Platform(OS)	
Evaluation Date	
Evaluator	

IDN link generation	generati	Generated link U-Label	Generated link A-Label	remarks
URL is wrapped with <> or ""				
U-Label				
<>				
""				
A-Label				
<>				
""				
URL is followed by White-Space				
U-Label				
A-Label				
line of URL only				
U-Label				
A-Label				

IDN link generation	generati	Generated link U-Label	Generated link A-Label	remarks
IDN is wrapped with <> or ""				
U-Label				
<>				
""				
A-Label				
<>				
""				
IDN is wrapped with White-Space				
U-Label				
A-Label				
line of IDN only				
U-Label				
A-Label				

IDN access	access	Passed string U-Label	Passed string A-Label	remarks
Automatically Generated				
U-Label				
A-Label				
User specified				
U-Label				
A-Label				