



Universal Acceptance: What it Means to Registries

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Agenda

- What is Universal Acceptance?
- Why Registries Should Care?
- TLD History Lesson
- Where We Want to Be
- Registry “Self-Assessment”
- Best Answer and Best Guess Games

Question to the Audience

What is
Universal Acceptance?

A prize for the easiest to
understand answer

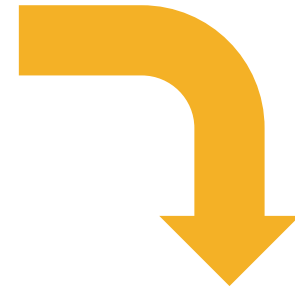
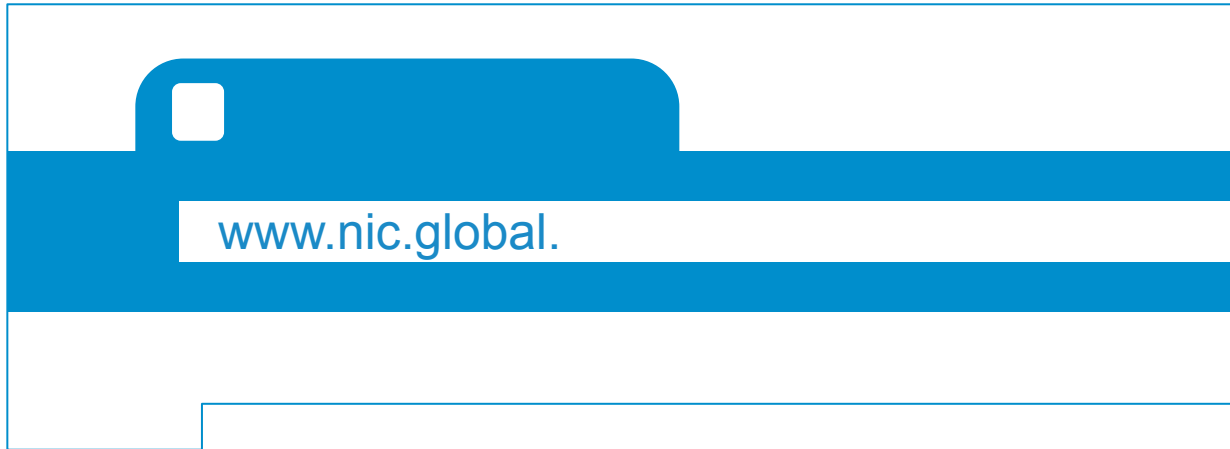
Background

- Some registries have experienced unexpectedly reduced names-under-management levels because their “names don’t work”

Why Universal Acceptance is an Issue

- Users are experiencing “bugs” when trying to use new gTLDs
 - Browsers and Email are affected
- Operators of new gTLDs and more visibly IDN TLDs (gTLDs and ccTLDs) are seeing limited demand for names in the zones
- Presents a challenge to the goals of the new gTLD program of user choice, user confidence and name space competition

Browsers Not Recognizing TLDs



Search

www.nic.global.

Global Result Example

www.global.example

Buy this product or service. We are an example company that handles an

Browsers Not Rendering Correct Script



www.nic.测试.

www.nic.xn--0zwm56d.

Internationalized Email Not Accepted

X

Message

Send

From:

Francisco

To:

? 麻烦先生@导航.中国

Cc:

mistertrouble@navigation.china

Subject:

Urgent! New project for you

Question to the Audience

Why Registries Care?

The Benefit of Universal Acceptance

- Competition, consumer trust and choice benefit when there is no “lock-in” to a subset of the DNS
 - Individually a registry will see **higher demand** when technical barriers are dropped
 - Collectively registries will see a **growing market** when consumers see risk become an afterthought
- “Drinking one’s own champagne”
 - If one can’t register a name, it can’t be used anywhere

TLD History Lesson



At the Dawn of the TLD Space

- “com/net/org” and the ISO 3166 two-letter codes
 - All but one [arpa.] three letters or shorter
 - All in “plain” ASCII
 - No changes to DNS root beyond new ISO 3166 codes
- Email addresses (mailbox names) were ASCII
- Assumptions were made, “burned in”
 - User interfaces would list valid TLDs
 - Security rules were built according to the list

Initial TLD Expansions

- Expansion approved in 2000 and again 2003
 - Set of gTLDs in 2000
 - Set of sTLDs in 2003
 - First non-ccTLD changes since 1988
 - Some names were longer (4 letters and more)
- Broke assumptions about valid TLDs, name length

IDN ccTLDs Arrive

- Expansion into IDN ccTLDs
 - First encoding of operating non-ASCII TLDs
 - IDN test TLDs were not operational (little impact)
 - Names were much longer (more letters) than earlier sets
 - Right-to-left scripts challenged user interfaces
- Broke assumptions regarding ASCII in TLD names

2012 gTLD Program

- Hundreds of new gTLDs were proposed
 - First of these TLDs delegated in October 2013
 - Longer ASCII names
 - More IDN (non-ASCII) names
 - Many delegated every week
- Broke assumptions of “few changes” to the root

Internationalized Email

- Email names extended from ASCII to UTF8
 - IDN TLDs enabled only this
 - mistertrouble@东西.测试.
 - Internationalized email (RFC 6530) enables this
 - 麻烦先生@东西.测试.
- Broke assumptions in email systems and viewers

Where We Want to Be

TLD Problem Statement

- Domain names in a TLD must be useable in applications regardless of the written script, length or newness of the TLD
 - This captures the troubles due to broken assumptions, we now have
 - Non-ASCII/IDN TLDs
 - Longer TLD names
 - Rapid introduction of TLDs
 - Useable is an open term, to be defined by context

How Does Internationalized Email Fit?

- Internationalized email is a driver for IDN TLD adoption
 - Cultures that benefit from IDN want to benefit from email
 - A “killer app” even though not a technological enabler
- Referring to “useable”
 - Define domain names to be useable when email addresses of the same script are fully functional

We Would Like Support for

1. Any TLD
2. Internationalized Domain Names
3. Internationalized Email

Registry Self-Assessment

Registry Self-Assessment

- Following will be a series of questions a registry can ask of itself to assess whether it adheres to the principles of universal acceptance
- **% Estimation Game**
 - Five (5) Questions: yes or no answer
 - What is the % ratio of yes for this Roadshow Crowd
 - Write your estimated % number (ex: 0% to 100%) on a sticky and post it on your team flip chart
 - Prize for the most accurate estimate

Registry Self-Assessment game Instruction

- For each one of the 3 questions
 - Mark your individual page
 - Discuss the question as needed
 - Count the number of yes and no at your table
 - Example: Q1: Yes: 6 No: 0
 - Report out to the facilitator

Q1: Does my Registry support any TLD?

- Name servers
 - Via EPP/Registration Rules, DNS, Whois, Escrow
- Email Registrant and Contact information
 - Via EPP/Registration Rules, Whois, Escrow
- Registrar's email and other contact information
 - For example for billing, any means of contact to conduct business

Q2: Does my Registry support IDNs?

- Can a registrant add an NS record with IDNA2008 labels present?
- Can this name be seen in it's U-label (written script) form?
 - For example, in the registry's web-based Whois?
 - Keep in mind – the purpose of the self-assessment is to identify areas needing improvement, e.g., if Whois can only “do” ASCII, what can be done?

Q3: Does my Registry Support Internationalized Email?

- Can an internationalized email be submitted in contact information?
- Could the registry make use of that email address if it needed to contact the registrant?
- Can the email be displayed internationalized in Whois?
- Can the registry enter and maintain a business relationship with a registrar using internationalized email?
- Does the registry email system support internationalized email in general?

Registry Self-Assessment

- Are we ready for Universal Acceptance?
 1. Sum up counts of yes and no
 2. Yes over yes/no total
 3. Multiply by 100
 4. Answer => % for this Roadshow crowd
 5. Award to the best guesser

Thank you
for attending
the Roadshow

Further Information

- <http://la51.icann.org/en/schedule/wed-universal-acceptance>
- <https://community.icann.org/display/TUA/TLD+Universal+Acceptance+Home>
- <https://www.icann.org/resources/pages/tld-acceptance-2012-02-25-en>