

ICANN 33



INTERNATIONALIZED DOMAIN NAME IDN PROGRAM STATUS REPORT

6 November 2008

Tina Dam
Director, IDN Program

1 year of IDN TLDs in the root for test purposes



IDN SLD registrations since

- 2001 (testbed)
- 2003(protocol)



IDNs – what a year!

- Fast Track Draft Plan for public comments
 - Outstanding key issues:
 - Relation between IDN ccTLD operator, ICANN, community
 - Whether to establish a financial contribution model
 - Contention with existing TLDs and applied-gTLDs
 - Looking forward to settling issues at Mexico meeting
- IDN gTLDs in Draft Applicant Guidebook
 - Technical requirements the same as for Fast Track
- IDNA protocol revision
 - Latest consensus voting
 - Next meeting in Minneapolis November 2008



Detailed Status Report Topics

- IDN ccTLD Fast Track Process
- IDNs in New gTLDs
- IDN TLDs in IANA Function
- IDNA Protocol Revision
- IDN Local Initiatives
- IDN Guidelines
- IDN wiki





IDN CCTLD FAST TRACK PROCESS

Draft Implementation Plan released for public comments



Overall IDN ccTLD Fast Track Status

- The Fast Track is a process for introduction of a limited number of IDN ccTLDs that:
 - Are associated with the ISO3166-1 list
 - Will meet near term demand for ready territories /countries
 - Preserve stability of the DNS
 - Do not pre-empt the IDN ccPDP
 - Are not based on characters from the Latin script
 - Are non contentious
- Fast Track Draft Implementation Plan released
 - Public comment period open through 8 Dec 2008
 - Report published of staff considerations of previously received public comments received for information
 - Report published over responses received from ccTLD managers and relevant public authorities



Draft Implementation Plan

- Requested by the ICANN Board at the Paris meeting:
 - *Resolved (2008.06.26.05)...submit a detailed implementation report including a list of any outstanding issues to the Board in advance of the ICANN Cairo meeting in November 2008*
- Based on the recommendations provided by the [IDNC WG Final Report](#)
 - - and on received public comments
- Contains elements not part of the recommendations from the IDNC WG
 - Decisions needed for the process to be implemented in a sustainable way
- The plan is presented in modules to be detailed and finalized:
 - Module 1: General Introduction and Background Information
 - Module 2: Fast Track Eligibility Requirements
 - Module 3: TLD String Criteria and Requirements
 - Module 4: Technical Committee Considerations
 - Module 5: Fast Track Request and Evaluation Process
 - Module 6: TLD Delegation Process
 - Module 7: Discussion of Additional Topics



Mod-2: Fast Track Eligibility Requirements

- ISO3166-1 Representation
 - the country/territory must be represented in the ISO 3166-1 list
 - Exception is the EU, also eligible
 - ccTLD operator can act as requestor with support from country/territory provided
- Reason for limitations
 - Guiding Principle B and F from IDNC Final Report:
 - Experimental in nature
 - Not pre-empting the IDN ccPDP outcome

Country names	ISO 3166-1-alpha-2 code
A	
AFGHANISTAN	AF
ALAND ISLANDS	AX
ALBANIA	AL
ALGERIA	DZ
AMERICAN SAMOA	AS
ANDORRA	AD
ANGOLA	AO
ANGUILLA	AI
ANTARCTICA	AQ
ANTIGUA AND BARBUDA	AG
ARGENTINA	AR
ARMENIA	AM
ARUBA	AW
AUSTRALIA	AU
AUSTRIA	AT
.....



Mod-3: TLD String Criteria and Requirements

- Language and script criteria
 - official language for the country/territory
 - ISO 639 language in UNGEGN Manual
 - administrative language ISO 3166-1, column 9 or 10
 - relevant public authority confirmation
 - used in official communications
 - serves as a language of administration
 - Non-Latin scripts only
- Meaningfulness criteria
 - Name, part of the name, or acronym of country/territory
- Number of strings per country/territory
 - One (1) per official language or script
- Technical requirements
 - Standard DNS and specific IDN requirements
 - To be revised as the IDNA protocol revision is completed



Mod-3: IDN TLD Technical Requirements I

- The string must be a valid internationalized domain name, as specified in technical standards <http://www.icann.org/en/topics/idn/rfcs.htm>. This includes the following:
 - Must only contain Unicode code points that are defined as “Valid”, and be accompanied by unambiguous contextual rules where necessary.
 - Must be fully compliant with Normalization Form C.
 - See examples in <http://unicode.org/faq/normalization.html>
 - The string must consist entirely of characters with the same directional property.
 - The string must not begin nor end with a digit (in any script).



Mod-3: IDN TLD Technical Requirements II

- The label must meet the relevant criteria of the ICANN *Guidelines for the Implementation of Internationalized Domain Names*. This includes the following, non-exhaustive, list of limitations:
 - All code points in a single label will be taken from the same script as determined by the *Unicode Standard Annex #24: Unicode Script Property*.
 - Exceptions are permissible for languages with established orthographies and conventions that require the commingled use of multiple scripts. However, even in the case of this exception, visually confusable characters from different scripts will not be allowed to co-exist in a single set of permissible code points unless a corresponding policy and character table is clearly defined.



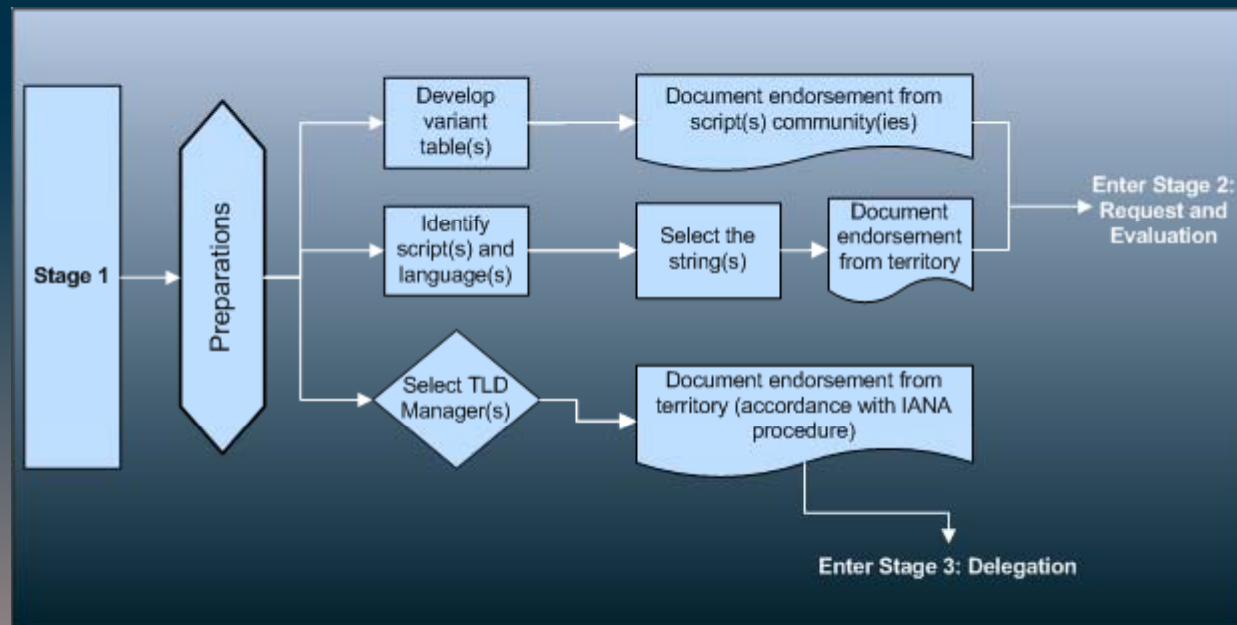
Mod-4: Technical Committee Considerations

- Technical requirements are core criteria
- All IDN ccTLD strings in the Fast Track will undergo technical evaluation, proposed
 - By the entire Technical Committee
 - Issues identified will receive further review by 3-person panel
 - Decision reached within 30-days
- The Technical Committee may seek clarifications from the requestor if issues are identified
- The Technical Committee is to be formed



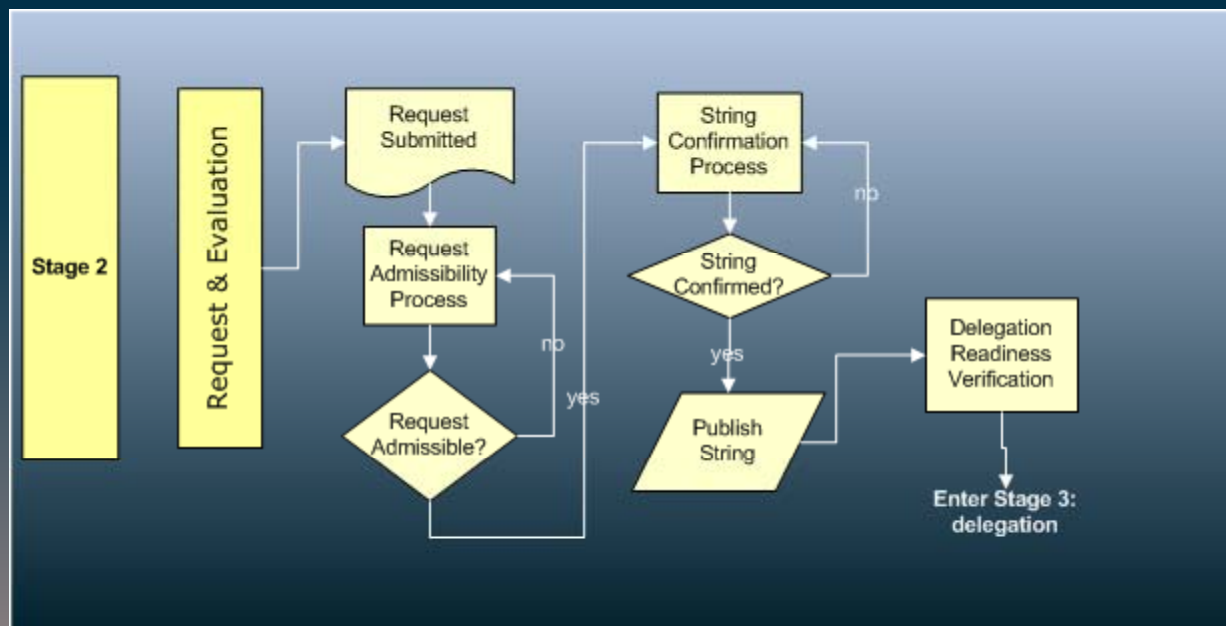
Mod-5: Fast Track Request and Evaluation Process

- Three step process as recommended by IDNC
- Preparation Stage:
 - Country/territory identifies & documents support for
 - language(s), script(s), name(s), variant and reg-policies
 - ICANN IDN & General Support Function is available



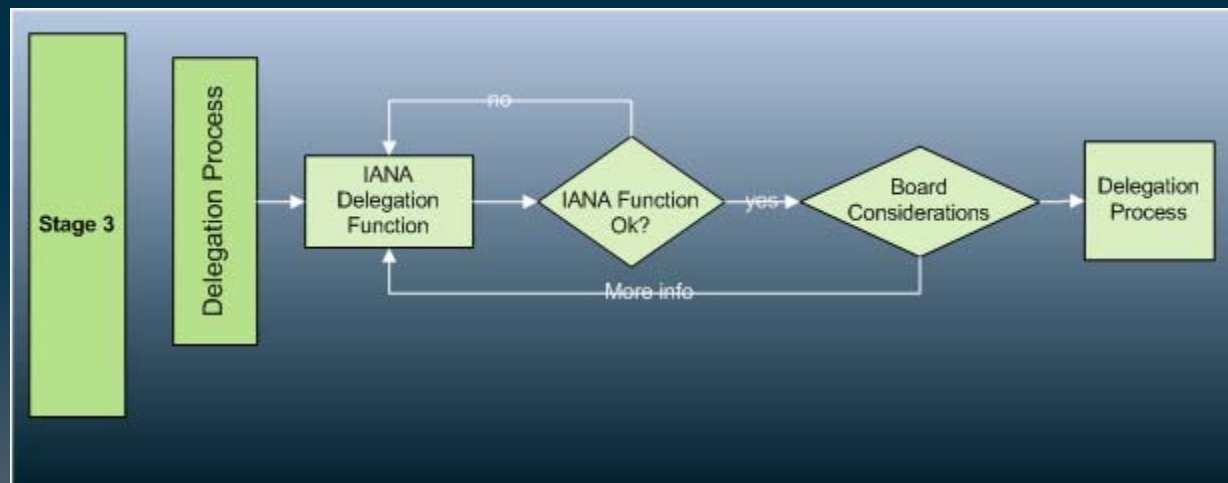
Mod-5: Fast Track Request and Evaluation Process

- The Request & Evaluation Stage:
 - Manual processing due to expected volume
 - Administrative Acceptability Check
 - String Confirmation Check (linguistic and technical)
 - Publishing of the requested string(s)

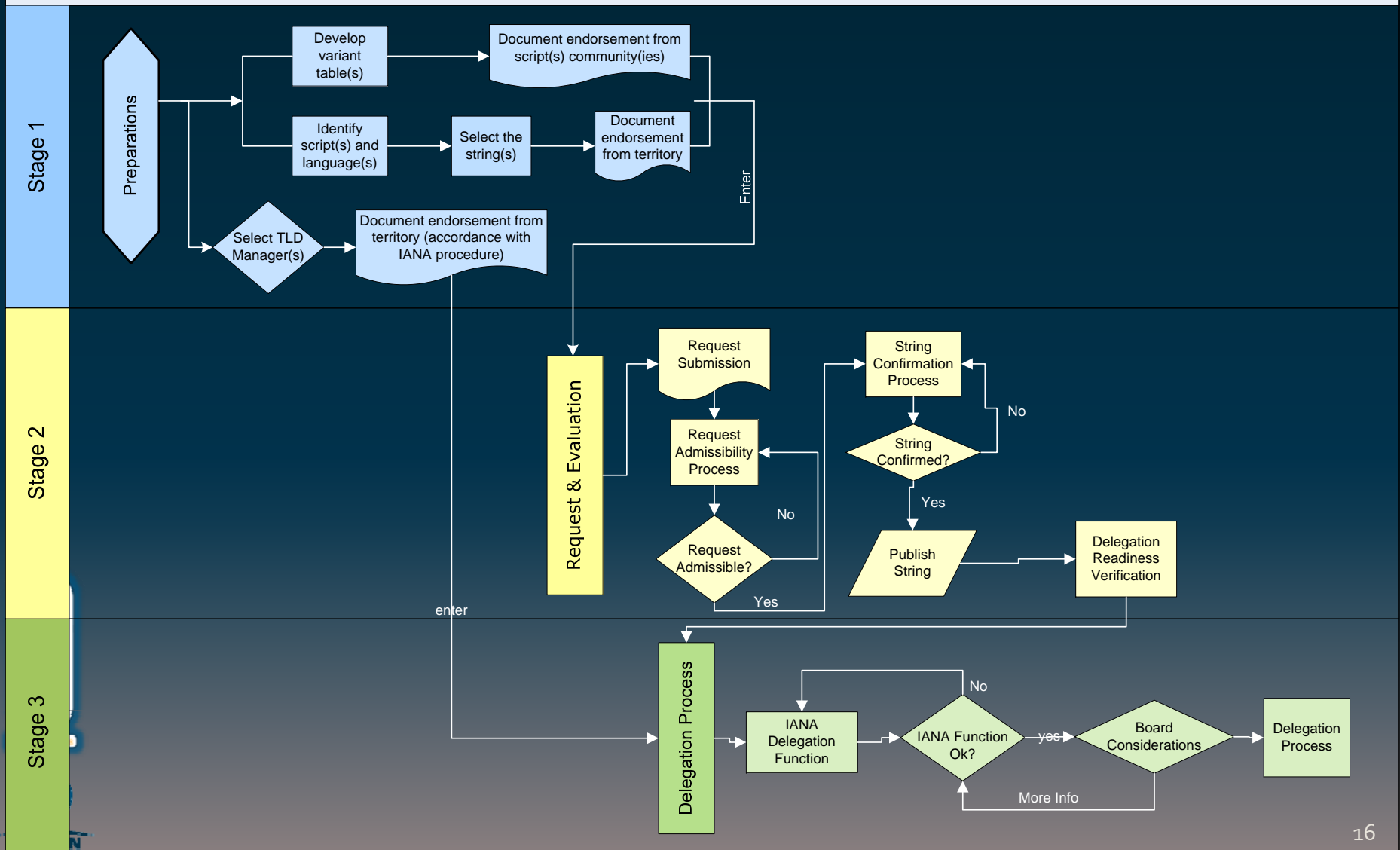


Mod-5: Fast Track Request and Evaluation Process

- The Delegation Process Stage:
 - Standard IANA Function and delegation Process
 - Detailed in Module 6



IDN Fast Track Implementation Process



Mod-7: Discussion of Additional Topics

- Presentation of additional issues for community discussion
- Need to reach decisions for sustainable and finalization of implementation, on:
 - Ensuring compliance with IDN technical standards
 - Possible establishment of financial contributions.
 - IDN ccTLD operator association to ICANN community.
 - Compliance with consensus policies
 - Prevention of contention w/existing & applied-for TLDs



Responses to the RFI Letters

- # of letters to national governments: 252
- # of letters to ccTLD operators: 252
- # of received responses: 58
- # interested in Fast Track IDN ccTLD: 32
 - Listed IDN ccTLD string: 30
 - Not listed IDN ccTLD string: 10
 - Some not interested listed Latin based string
- Total 14 languages represented
- Earliest available: within 3 months
- Latest available: end 2010



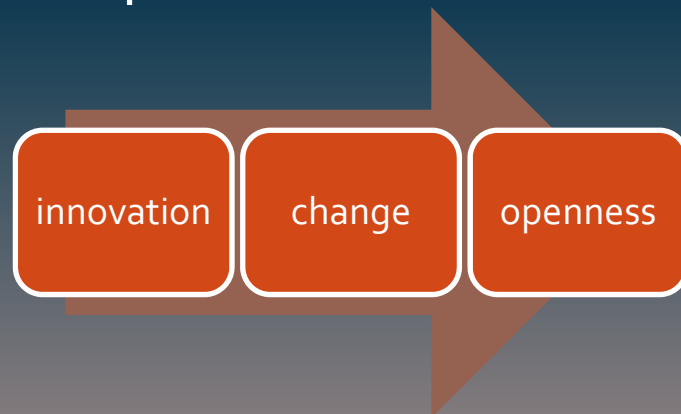


IDNS IN NEW GTLD PROCESS

Applicant Guidebook Released

IDN gTLDs

- Included in the process for New gTLDs
- Draft Applicant Guidebook available
 - Public comment period through 8 December 2008
- IDN Technical requirements the same
 - No difference between an IDN gTLD and IDN ccTLD from technical standpoint





IDN TLDS IN THE IANA FUNCTION

Additional fields of information needed

IDN TLDs in the IANA Function

- A guide to the delegation procedure for existing country-code top-level domains is described at
 - <http://www.iana.org/domains/root/delegation-guide/>
- Requests for delegation of a ccTLD comprises
 - Formal template
 - Supporting documentation
- Augmentations for IDN ccTLDs relates only to IDN specifics, such as inclusion of:

1. A-label	2. U-label
3. Short-form of string (English)	4. Language of label (ISO630-1)
5. Language of label (English)	6. Script of label (ISO 15924)
7. Script of label (English)	8. Unicode code points (list)





IDNA PROTOCOL REVISION

Within the IETF and working towards "Last Call"

Rationale for the IDNA revision

- Proposed revision at IETF
 - RFC4690 requests the revision and provides suggestions to solutions to some problems
- Reasons and results of the revision:

Current Version	Revised Version
Unicode version 3.2	Unicode version independent
Some/New characters excluded	All characters in Unicode will have a status
Not all words can be represented	Not all words can be represented
Exclusion Based: - Table based	Inclusion Based: - Property and procedure based: - Protocol-valid (w/ context rules) - Disallowed - Unassigned
App developers have difficulty in understanding description of standard	Separates registration and resolution in detailed steps

IDNA Protocol Revision

- Overview of revision of documents, by Patrik Faltstrom:
 - <http://stupid.domain.name/idnabis/>
 - Overall rationale and explanation
 - Protocol: registration vs. resolution
 - Tables and procedures
 - Bidirectional issues solutions
- Several new versions has just been released during the ICANN Cairo meeting
 - These have been based on recent consensus vote and associated feedback



IDNA Protocol Consensus Votes

- Status today:
 - Consensus voting in the IETF IDN working group
 - Voting results will show how close we are to “Last Call”
 - Next IETF meeting is mid November 2008, Minneapolis, USA
 - IDN TLD technical requirements will change over time as the protocol revision is continued and finalized
 - Overall preference is to have the protocol revision finalized before introduction of IDN TLDs
 - Should this not be possible, then additional technical requirements are anticipated in both gTLD process and ccTLD Fast Track process





IDN GUIDELINES

Need to be revised following the IDNA revision



IDN Guidelines

- Will be a requirement for all new TLDs that implement IDNs
 - Including gTLDs and Fast Track ccTLDs
- Will be amended to be in coordination with final protocol revision





IDN LOCAL INITIATIVES

Language and script communities are merging on local rules

Example of Local Initiatives: Arabic Script IDN Working Group - ASIWG

- An open, self-organizing group that consists of interested parties in the implementation of Arabic script in IDNs
- Its ultimate goal is to develop a unified Arabic script table along with all variants, and to serve as a best practice for other scripts to follow



Recommendations so far

- Variants should be registered/reserved to the same registrant
- Restrict the 3 Arabic sets of numerals from mixing at the protocol level
- Dealing with <space> is more of an application layer issue, to be resolved later and potentially by a different group
- At this stage, implement IDNs without Harakat/Tashkeel (Diacritics)



Other ongoing work

- Complete the identification of visually confusable characters
- Agreeing on Pvalid Characters / Code points that are not to be included in the Unified Arabic Script Table, at this stage at least
- Coming up with guidelines on the registration process for languages implementing Arabic Script
- Outreaching to other language communities





IDN WIKI

Adding languages/scripts and font features



IDNA protocol and IDN wiki – try it out

- <http://idn.icann.org>
- <http://josefsson.org/idn.php>
 - IDNA ToASCII
 - IDNA ToUnicode
- If you can't type in an IDN then search for your favorite newspaper online and copy-paste it
 - or you can copy-paste text from the IDN wiki
- Try copy / paste between applications you normally use



IDN wiki at http://idn.icann.org

[article](#) | [discussion](#) | [view source](#) | [history](#)

IDNwiki

Welcome to the IDN TLD evaluation gateway!

There are new articles on [Additional languages](#) and [Technical](#)

Contents [hide]

- 1 Introduction
- 2 Your participation is important!
- 3 Limited evaluation period
- 4 Things to test
- 5 Further information about the IDNwiki
- 6 The example.test names

Introduction

This page provides an introduction to a test of IDN top-level domain names that ICANN is coordinating. The test is based on eleven new internationalized domains representing the name **example.test** entirely in scripts other than the familiar Latin characters that appear in current top-level labels. The languages initially selected for illustrating this are listed in the table below, and the rationale behind their choice is discussed in the sidebar article on [basic concepts](#). These TLDs can be accessed by clicking on the links in the first column in the table. However, as with any other IDNs, if they are typed or copied and pasted directly into the address line of a browser, they will only work if that browser has full support for IDN. The names in the second column are intended to be used in that manner and, if they don't initially perform as intended, some software reconfiguration may help. Additional articles discuss [local configuration](#) and individual [software applications](#).

Your participation is important!

Public participation in the evaluation of these domains is one of the most important parts of the project. Joining this initiative requires nothing more than for you to click through one or more of the links in the table and report about the experience on the "discussion page" indicated with a tab at the top of this and the other IDNwiki articles.

- Were the results what you expected?
- Were there any problems that you couldn't solve?

Script	Language	SLD.TLD U-labels	SLD A-label	TLD A-label
Arabic	Arabic	مثال.إختبار	xn--mgbh0fb	xn--kgbechtv
Arabic	Persian	مثال.آزمایشی	xn--mgbh0fb	xn--hgbk6aj7f53bba
Chinese, simplified	Chinese	例子.测试	xn--fsqu00a	xn--0zwm56d
Chinese, traditional	Chinese	例子.測試	xn--fsqu00a	xn--g6w251d
Cyrillic	Russian	пример.испытание	xn--e1afmkfd	xn--80akhbyknj4f
Devanagari	Hindi	उदाहरण.परीक्षा	xn--p1b6ci4b4b3a	xn--11b5bs3a9aj6g
Greek	Greek	παράδειγμα.δοκιμή	xn--hxajbheg2az3al	xn--jxalpdlp
Hangul	Korean	실례.테스트	xn--9n2bp8q	xn--9t4b11yi5a
Hebrew	Yiddish	בבשס.לפיששס	xn--fdbk5d8ap9b8a8d	xn--deba0ad
Kanji Hirigana, and Katakana	Japanese	例え.テスト	xn--r8jz45g	xn--zckzah
Tamil	Tamil	உதாரணம்.பரிட்சை	xn--zkc6cc5bi7f6e	xn--hlej6aya9esc7a

Status of the .test wiki

- Purpose of the IDNwiki:
 - Introduce users to IDN TLDs
 - Applications test environment for usability
 - Registry information about user problems
- Conduct an experiment with IDN TLDs
 - not a pre-requisite for production in root zone
 - no registrations are available
- Functions as a “normal wiki”, user access



**Internationalization of the internet means that
the internet is equally accessible from all
languages and scripts**



شكراً لكم

tina.dam@icann.org

<http://icann.org/topics/idn>

