apTLD

Asia Pacific Top Level Domain Association
www.aptld.org

APTLD REPORT

Status of IDNs in ccTLDs (2018)

Access: report for distribution to APTLD members
Sources: IDN launch and use survey (2018) in conjunction with EURid (.eu) and CENTR. Additional responses from LACTLD and AFTLD.   Data has been sourced from the most recent edition of this survey and supplemented by surveys from previous years. Some visuals in this report are courtesy of CENTR.
Sample: 46 TLDs

Summary
This survey runs annual and is initiated by EURid in conjunction with UNESCO. The survey collected information from ccTLDs on the status of their IDN offerings and support. Of the 46 surveyed ccTLDs, a majority (80%) offer IDN registrations at the second level.
The data suggests that although most ccTLDs around the world have taken the initiative to offer IDNs from a technical point of view, registration numbers do not indicate much progress has been made. In terms of the domain registrations the figures both in Asian and European market show very low numbers of registrations (proportion to overall domain counts). Ratings given by registries on user uptake, registrar support and end user awareness also do not rate well. This might be of concern also considering that a majority of ccTLDs surveyed (60%) began offering IDNs prior to 2010.
When asked how uptake could be improved, the most common responses was around the topic of universal acceptance - support in applications/protocols/mail clients etc. see all comments in annex 1.1

IDN support and scripts: Around 80% of recorded ccTLDs offer registration of IDNs with a further 7% (3 ccTLDs that are in preparation stages (.bo, .fo, .xn—q7ce6a). In most cases, the ccTLD offer scripts considered to be the minimum required within their country or territory. The most common scripts offered are Latin, Arabic and Cyrillic. See annex 1.0 for scripts offered.
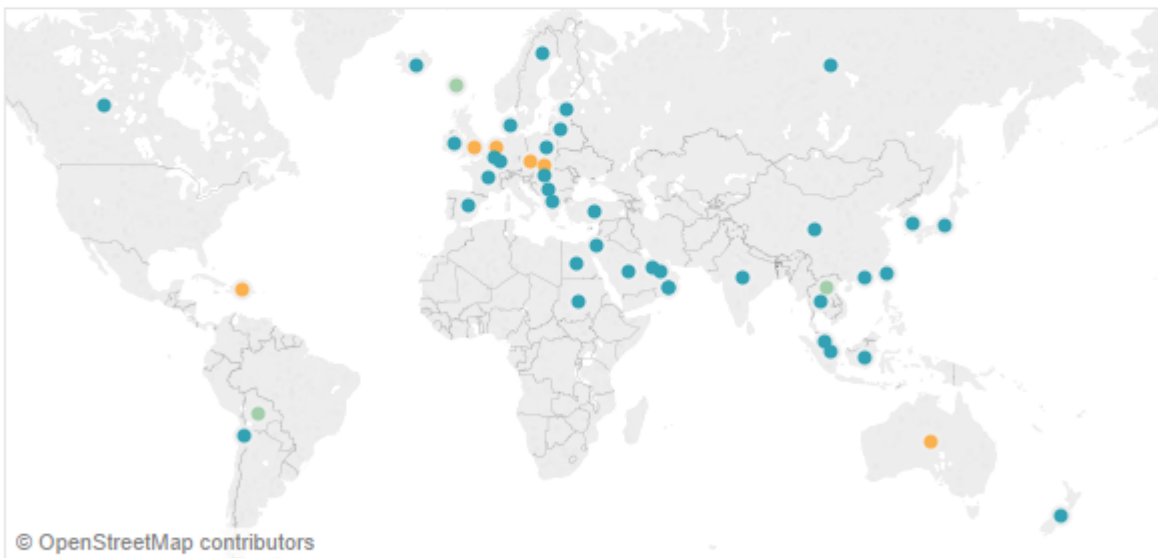
IDNs support

Selected region/s: All. Recorded TLDs: 46

Supported	37	80%
Not supported	6	13%
In preparation	3	7%

Source: Launch and use of IDNs (2018) (CENTR, APTLD, LACTLD, AFTLD). Updated: February 2018.
Original question: Does your registry allow IDN registrations?

IDNs support

■ Supported
■ Not supported
■ In preparation

IDN scripts permitted

Selected region/s: All

Minimum to support official language/s in country/territory	31	89%
Extended character set	6	16%

Homoglyph bundling: Over all regions, only 28% of ccTLDs support homoglyph bundling of IDNs however this figure is increased when looking at the Asia Pacific region where it is around 44%.

Homoglyph bundling support
Selected region/s: All

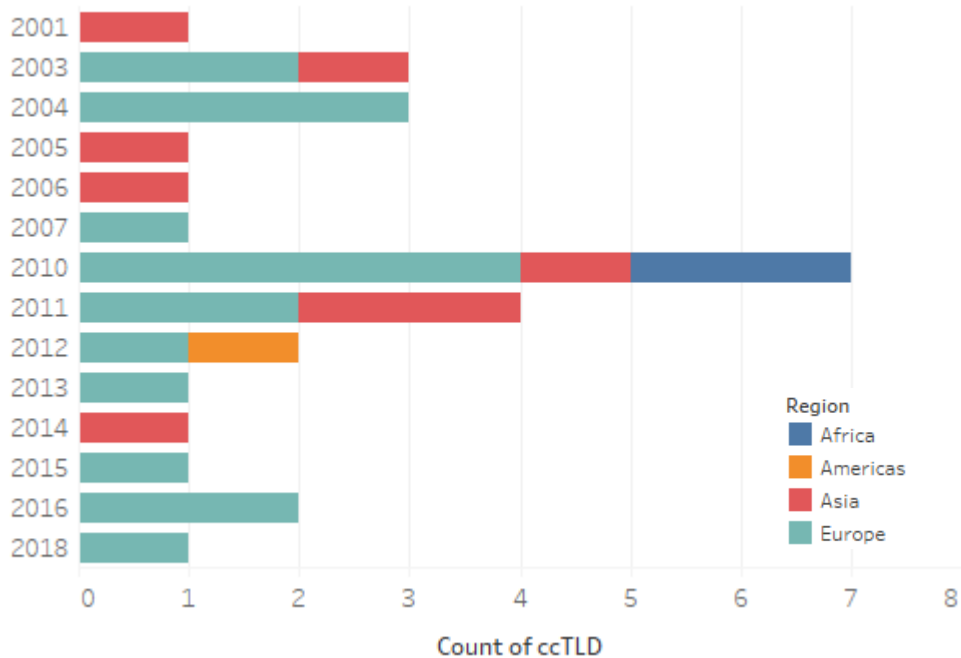|		
Not supported	29	73%
Supported	11	28%

More information on Homoglyph bundling

Registration form: Just over half of ccTLDs offer IDN registration in both xn or IDN form (as opposed to registries that offer only via xn or IDN).

Registration form of IDNs
Selected region/s: All

Both IDN and xn--form	20	53%
IDN form	9	24%
xn--form	9	24%

Year of IDN introduction: Most ccTLDs have introduced their IDN support in 2010 or before. The chart below shows how many ccTLDs introductions IDNs by year.
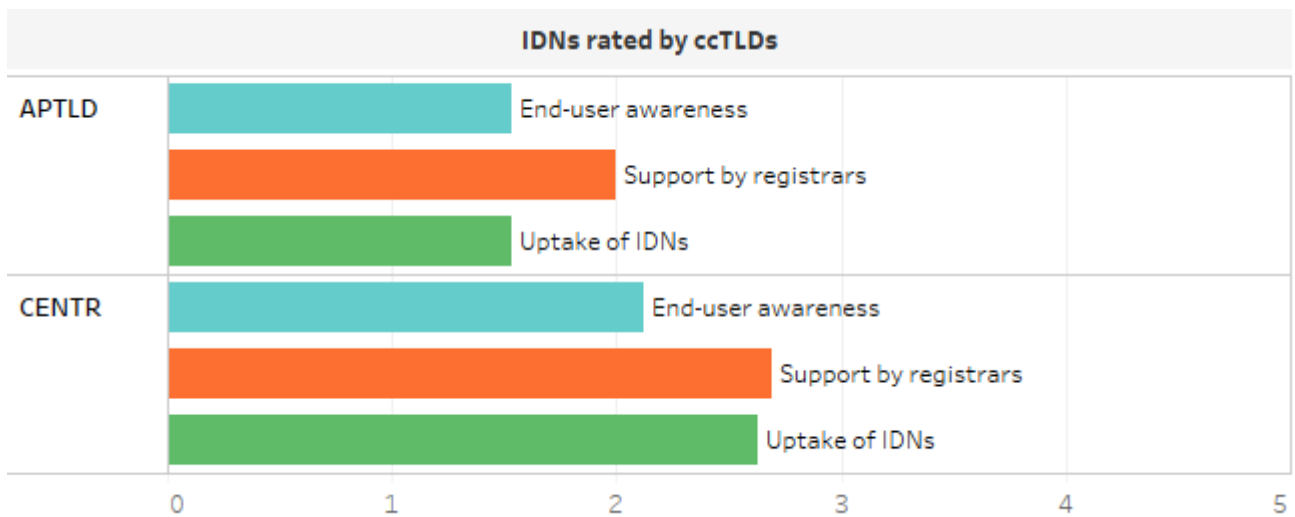
Year of IDN introduction

Registrations: Generally, IDN registrations are very low proportional to overall domain counts averaging around 7.0%. In the European region, the average is under 3%.

IDN registrations in ccTLDs (Dec 2017) – APTLD members

TLD	IDNs	Domains	IDNs (% domains)
.hk	24,551	282,610	8.7%
.jp	109,777	1,471,982	7.5%
.my	2,099	339,402	<1%
.nz	135	686,496	<1%
.qa	300	NA	NA
.sg	1,306	177,782	<1%
.th	18,523	85,825	21.6%
.tw	75,022	737,759	10.2%
Average (APTLD)			7.0%
Average (European top 20 ccTLDs)			*2.5%*

Rating of IDNs: Respondents were asked to rate on a scale of 1 to 5 (5 being the highest) aspects of IDNs. Results show that across all recorded regions, IDNs have not rated highly in terms of either uptake, registrar support or end-user awareness.

Note: insufficient data from LACTLD region to include in calculations

Annex 1.0
Scripts offered (all recorded ccTLDs)

Script	ccTLDs
Arabic	.om .qa .xn--h2brj9c .xn--mgb9awbf .xn--mgbaam7a8h .xn--mgberp4a5d4ar .xn--mgbpl2fh .xn--wgbh1c
Cyrillic	.ie .mk .pl .rs .ru
Danish	.dk
Devanagari	.xn--h2brj9c
Greek	.pl
Han	.hk .jp .sg
Hangul	.xn--3e0b707e
Hebrew	.il .pl
Hiragana	.jp
Katakana	.jp
Latin	.be .bo .ca .cl .ee .es .fr .hu .is .lt .lu .pl .se
Maori	.nz
Other	.dk .fo .nz
Thai	.th
Turkish	.tr

Additional comments on scripts offered - APTLD members only

TLD	Please give details of the script(s) or special characters you offer
.hk	TLD: TW Language Tag: ZH-TW Language Description: Traditional Chinese Version: 4.0.1 Effective Date: 31 March 2005 http://www.iana.org/domains/idn-tables/tables/tw_zh-tw_4.0.1.html TLD: CN Language Tag: zh-CN Language Description: Chinese Version: 4.0 Effective Date: 31 March 2005 http://www.iana.org/domains/idn-tables/tables/cn_zh-cn_4.0.html
.id	default from unicode.org
.my	For Jawi script, we use Unicode Arabic Table and Unicode Basic Latin Table (hyphen minus and digits).
.nz	ā ē ī ō ū
.qa	NFC UNICODE, ARABIC
.sg	Han script using CDNC table
.th	Thai script
.tw	Han
.xn--fiqs8s	CJK characters In Unicode, CDNC table
.xn--h2brj9c	Devanagari,Gujarati, Bengali, Punjabi , Tamil, Telugu, Kannada, Kashmiri, Malayalam, Odia (Oriya), Arabic
.xn--mgberp4a5d4ar	Arabic https://www.iana.org/domains/idn-tables/tables/xn--mgberp4a5d4ar_ar_2.xml
.xn--mgbpl2fh	Arabic
.xn--q7ce6a	.ລາວ

Annex 1.1

Comments on how to improve IDN uptake

Question: If there was one change (either within the registry or the wider market) which would improve uptake of IDNs, what would it be?

Universal Acceptance
General e-mail support
More education on IDNs
Better support in email clients.
Better support in mail applications
IDN would need to work in all contexts and protocols (email..)
The IDNs domain names should be able to be used in the same way as the ASCII domain names (especially for the email purposes). The registrars support should be higher than it is.   The more there will be IDNs domain names registered and used to communicate, the more visible they will be to end-users and the demand will grow.
I hope the development and popularity of IOT can help to improve the IDN in future
In my country the main character is latin, and not much using local languange/local character. so its difficult to increase IDN domain name
Within the Registry - general awareness building with the Public regarding the availability of the IDN product. A very limited number of .ie Registrars support/promote/offer IDNs - any increase in this could help with building awareness and uptake of IDN.
User Interface (easy bundling of idn/non idn domains) and billing issues.
e-mail software's acceptance of IDNs
- Improved email support for IDN   - For IDN and beyond: more online platforms offering domain name creation/renewal bundled with mail and/or website creation and hosting
Extended character sets
Marketing campaigns
increase awareness
Universal IDN acceptance (inc. full e-mail support)
greater awareness by end-users, greater usage of Chinese or Tamil in business/workplace in the country (right now the main language used in business is English, hence the low update of IDNs)
Most of the other services like e-mail services do not support IDNs. This prevents people to prefer use of IDNs in domain names.
If the support was done at protocol level (network or OS) not applications that solve the bundling/variants issues.
EAI (email address Internationalization) will improve the uptake of IDNs.
online selling
Government or public sectors actively use IDN for their PR, in which case it could lead to an improvement in raising public