



Universal Acceptance of IDN

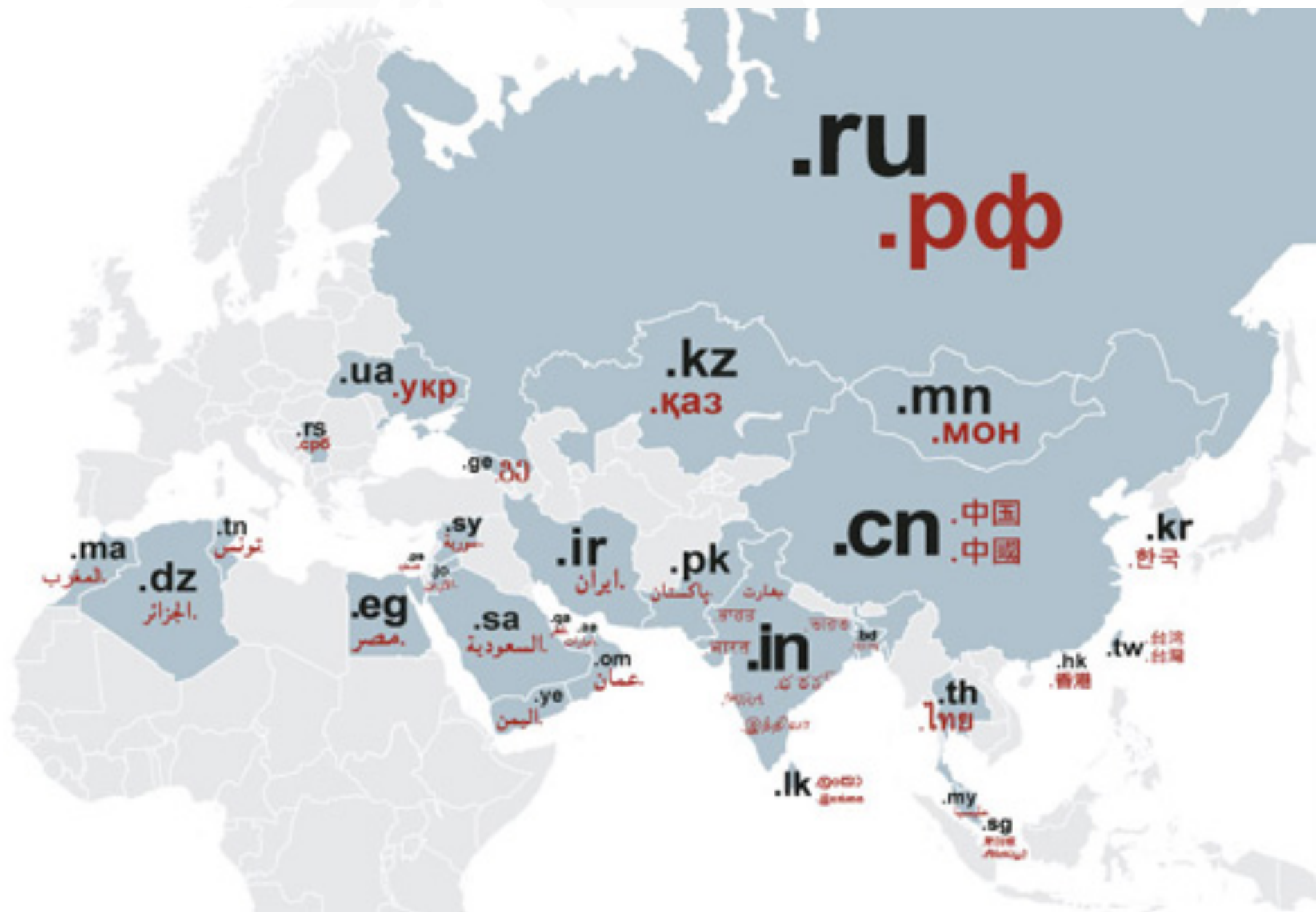
2015.07.02 | APrIGF | Macao

Edmon Chung

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from.Asia / for.Asia

書籍 商标 机构 セール 通販 游戏 谷歌
政务 在线 موقع 娱乐 公益 中文网 一号店 亚马逊
संगठन फ़ाउन्डेशन 商城 كاثوليك Москва 飞利浦
католик بيتك 佛山 點看 嘉里大酒店 網址 グーグル
ストア 盛貿飯店 рус 中信 企业 家電 淡马锡
健康 大拿 كوم 信息 онлайн 商店 香港電訊 همراه 食品 天主教
慈善 招聘 网店 手机 بازار 닷컴 餐厅 дети
org عرب 盛貿飯店 工行 काम 微博 香格里拉 موزايك 诺基亚
购物 شبكة vermögensberater 手表 ポイント 政府
移动 八卦 اتصالات nom 深圳 موبايلي 新闻 العليان
大众汽车 联通 네트워크 网络 欧莱雅 сайт 普利司通
電訊盈科 网站 世界 广东 点看 通用电气公司
クラウド 集团 KOM 时尚 公司 삼성 嘉里 アマゾン
كويوتل كوم 我爱你 珠宝
机构体制



A close-up, high-contrast image of a human eye. The eye is looking through a circular opening, possibly a porthole or a lens. The iris is a deep blue color, and the pupil is a dark, solid black. The surrounding area is dark and textured, suggesting a metallic or industrial environment. The text "A Matter of World View" is overlaid in white, sans-serif font across the center of the eye.

A Matter of World View

घी वालो का रास्ता





Businesses are known in their
native languages

.中国



Search and Register

Enter your desired domain name and click Search.

www.

.中国



SEARCH



Select & Register

ADD TO CART

<input type="checkbox"/>	Domain	Annual Fee	Setup Fee	Country / Category	Popular Restriction	Trustee
<input checked="" type="checkbox"/>	somedomainname.中国	39.95 USD / 1 Year	29.95 USD	China	Easy ▾	

[Also Available in these Domains](#)

101 My Account

101domain, Inc. (US)https://my.101domain.com/cart/splash.html?submit=+To+Google

someone@somedomainname.中国

Address*
123 Nathan Road

Country* Hong Kong

City* Tsim Sha TsuiState/Province

Postal/Zip Code* HK

Phone* +852 98765432

Fax +852 98765431

WHOIS Address
Enter in the address as you wish it to appear on your domain's WHOIS record. This address must be valid and only allows English characters

☒ Same as Billing Address

First Name* SomeoneLast Name* Using IDN

Company* Individual

Email Address* someone@somedomainname.中国

Address* 123 Nathan Road

Input

User Interaction /
Receiving Data

Output

Interface Display /
Reporting Data

Analytics

Administrative &
Operative Systems

Transport

Exchanging Data / Intra
& Inter Systems

Storage

Storing Data /
Representations

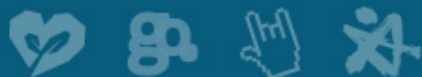


What is an IDN Variant?



IDN Variants in the Chinese Context

- A worst but “easiest to understand” analogy:
 - [www.doMain.asia](#)
 - [www.DOMaiN.asia](#)
 - [wWw.dOmaIN.aSIA](#)
- Simplified / Traditional Chinese
 - Traditional: [網域名稱.asia](#) | [網域名稱.亞洲](#)
 - Simplified: [网域名称.asia](#) | [网域名称.亚洲](#)
- Linguistic Origin
- Technical Limitations
- Policy Implementations



.Asia IDN Variant Policies

- Simplified and Traditional Chinese
 - CDNC Table (incorporating both CNNIC and TWNIC provisions)
 - Hong Kong (Cantonese) Supplementary Characters

繁體.asia

[ZH]
IDN-TAG



In Zone

繁體.asia
(Preferred Variants in DNS)



Reserved

繁體.asia 繁體.asia

(Mixed Simplified & Traditional Chinese IDN Variants are reserved and not included in the DNS)

學習中.asia

[JA]
IDN-TAG



Reserved

學習中.asia 学习中.asia 學習中.asia

(In a gTLD with Japanese and Chinese IDN registrations, a full Kanji IDN may be confused with a Chinese IDN. All IDN variants for JA are reserved and not in DNS)

of a gTLD

- 日本語.jp | 漢語.jp → Japanese
- 漢語.cn | 日本語.cn → Chinese
- 漢語.asia | 日本語.asia ?





What is homographic attack?

Homographic “Domain Attack”

- A worst but “easiest to understand” analogy:
 - `www.goog1e.com`
 - `www.google.com`
- Homographic Attack using IDN
 - English: `PAYPAL.com` | `paypal.com`
 - Greek+English: `PAYPAL.com` | `paypaλ.com`
- Similar looking characters
- Label Generation Rules: Character Repertoire
- Not necessarily related to “IDN Variants”

Phishing Domains Stats from APWG

Basic Statistics

	2H2014	1H2014	2H2013	1H2013	2H2012	1H2012
Phishing domain names	95,321	87,901	82,163	53,685	89,748	64,204
Attacks	123,972	123,741	115,565	72,758	123,476	93,462
TLDs used	272	227	210	194	207	202
IP-based phish (unique IPs)	3,095	2,317	837	1,626	1,981	1,864
Maliciously registered domains	27,253	22,679	22,831	12,173	5,833	7,712
IDN domains	103	112	82	78	147	58
Number of targets	569	756	681	720	611	486

Attack using IDN homographs: 0



Domain Registration Abuse Suspension Policy Forum

APTLD | Singapore | 2013.02.22



A governed process for suspending maliciously registered domains securely, prudently, and with manageable scale

The APWG Malicious Domain Suspension (AMDoS) system enables specially accredited users to submit suspected malicious domain names for investigation and suspension by Top-Level Domain registries when other remedial avenues have been exhausted.

Closely allied with governance bodies and corporate operational directorates responsible for brand integrity and remote channel security, the APWG was able to navigate the security and legal challenges that domain suspensions need to address in the development of its AMDoS application.

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ストア 盛貿飯店 рус 中信 企业 家電 淡马锡
健康 大拿 كوم 信息 онлайн 商店 香港電訊 همراه 食品 天主教
慈善 招聘 手机 بازار 닷컴 ابو ظبي 餐厅 дети 诺基亚
org 盛貿飯店 微博 香格里拉 موزايك
购物 شبكة 工商 手表 ポイント 政府
移动 八卦 اتصالات 深圳 موبايلي 新聞 العليان
大众汽车 联通 닷넷 网络 vermögensberatung
電訊盈科 网站 世界 广东 欧莱雅 сайт 普利司通
クラウド 集团 公司 点看 三星 嘉里 アマゾン
كوم 时尚 我爱你 珠宝
كوم 机构体制

Internet of Things 物联网



fridge.john.asia
冰箱.王某.网站

tv.john.asia
电视.王某.网站

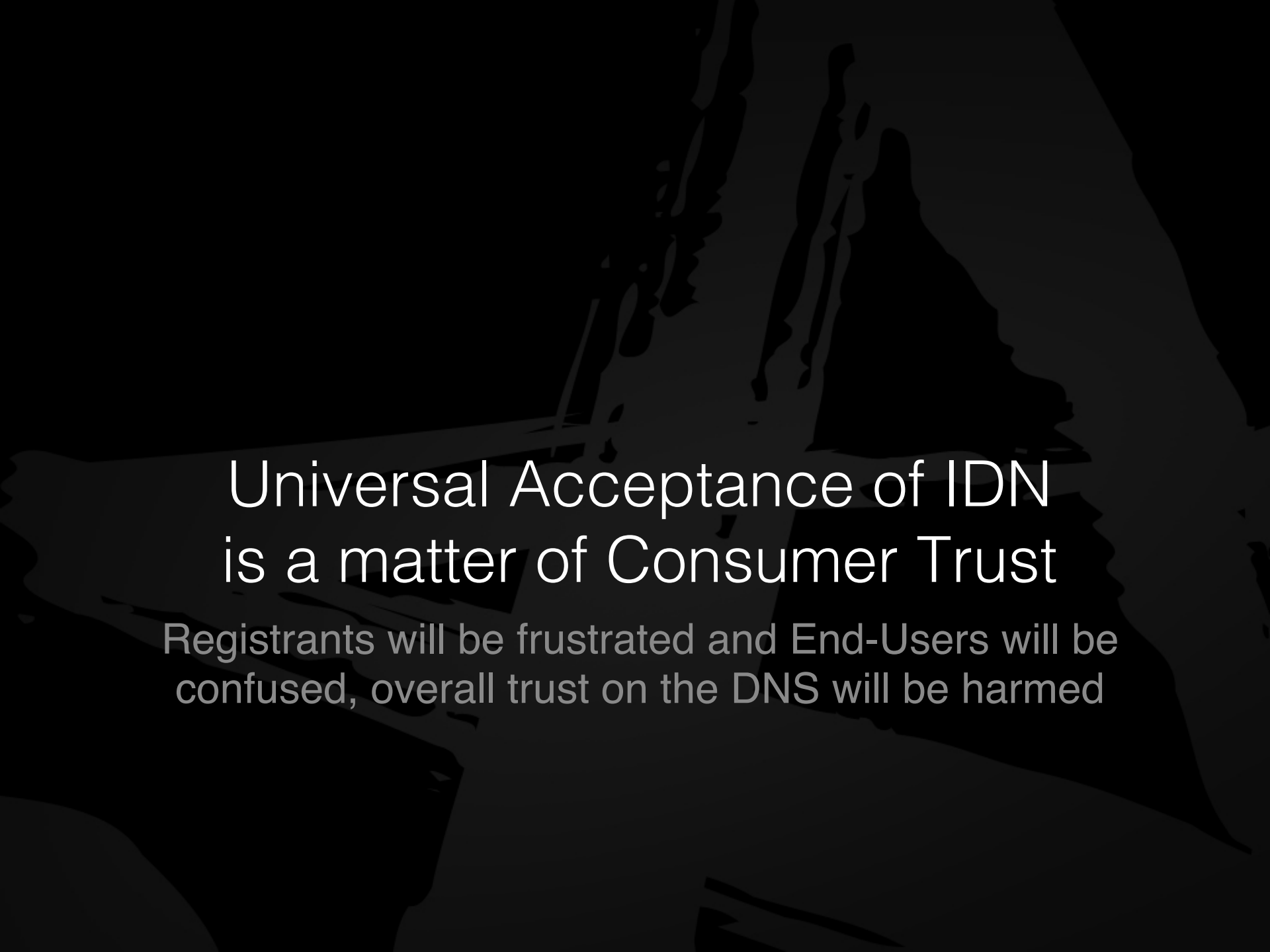
sink.john.asia
厨房.王某.网站

oven.john.asia
烤箱.王某.网站

Internet of Names 域名网



Identities that Connect with People



Universal Acceptance of IDN is a matter of Consumer Trust

Registrants will be frustrated and End-Users will be confused, overall trust on the DNS will be harmed

Every .Asia Domain Contributes to Internet Development in Asia

love.from.asia

Edmon Chung

<edmon@registry.asia>

