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LOS ANGELES

#ICANN51

15 October 2014

# Universal Acceptance

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#ICANN51



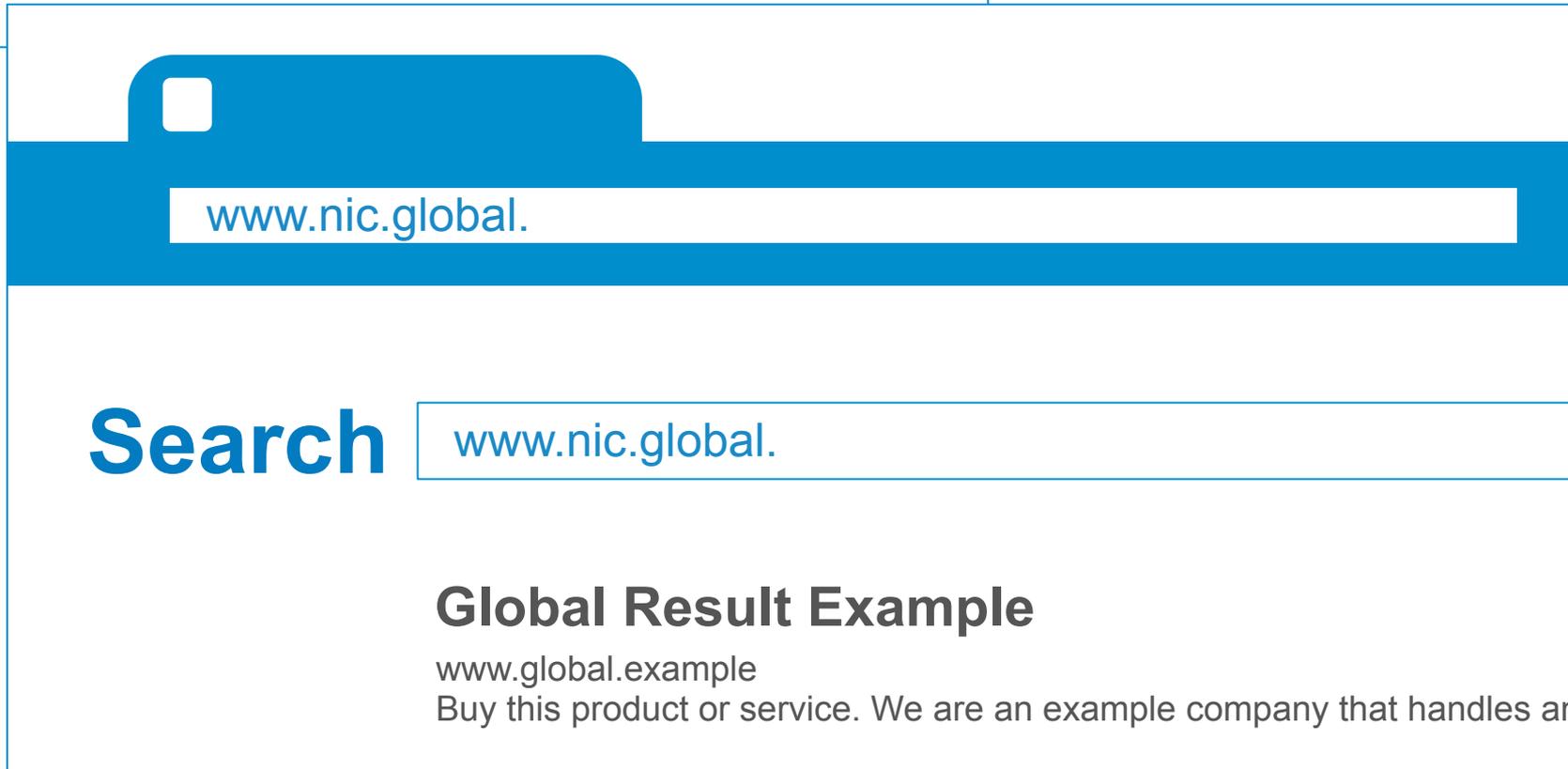
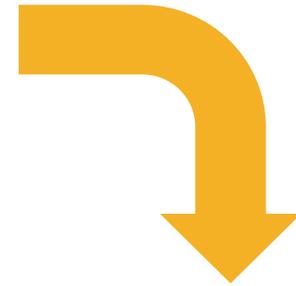
# Agenda

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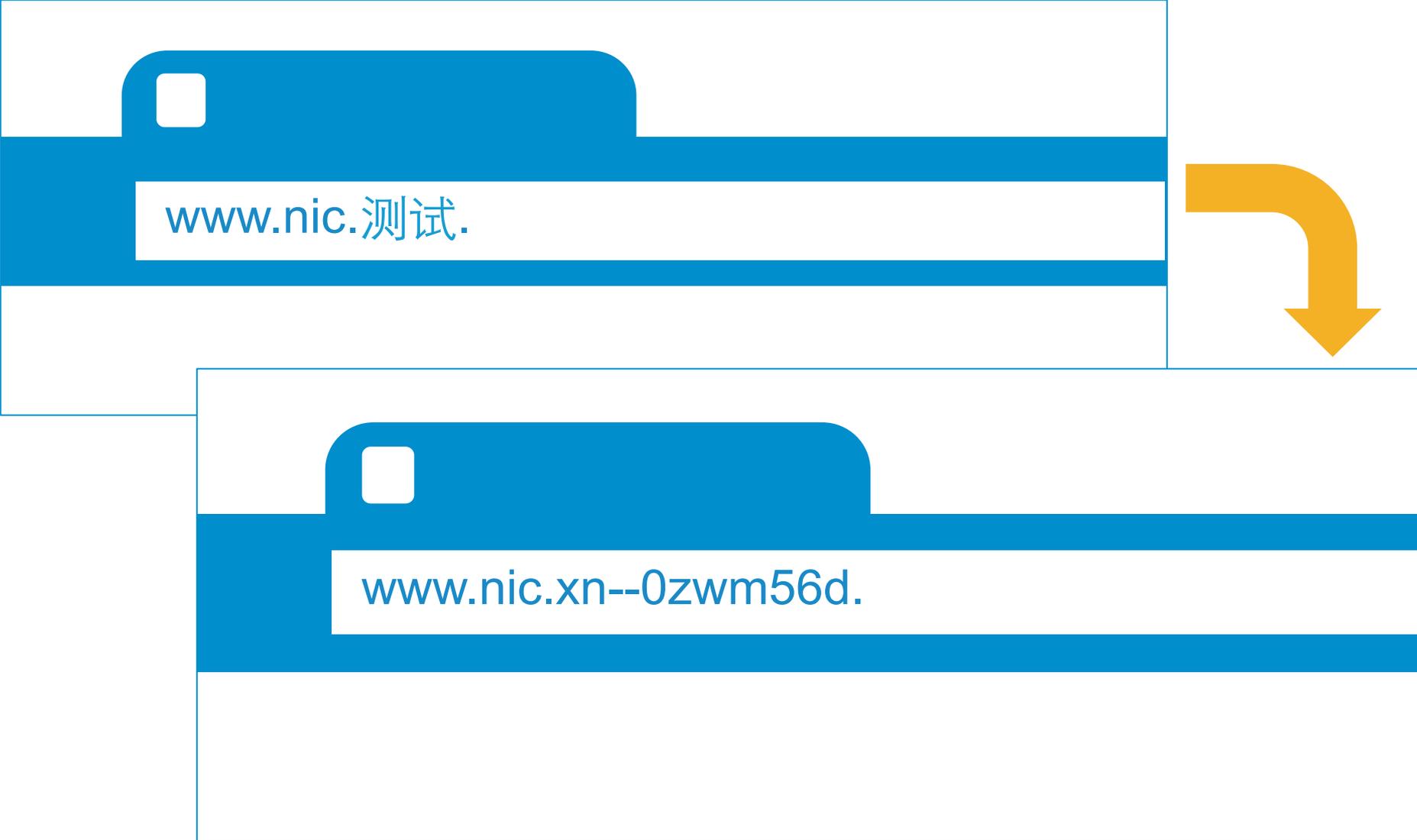
- What is *Universal Acceptance*?
- UA Initiative Roadmap
- Updating Internal Procurement
- UA Web Presence
- Measurement
- Support UA in the DNS Industry
- Applications/Service Vendor Panel

# The Challenges

# Lack of Support: All TLDs



# Lack of Support: Internationalized Domain Names



The diagram illustrates the conversion of an Internationalized Domain Name (IDN) to its Punycode representation. It features two browser address bars. The top bar contains the domain `www.nic.测试.`, where `测试` is in Chinese characters. A large orange arrow points from this bar to the bottom bar, which contains the domain `www.nic.xn--0zwm56d.`, where `xn--0zwm56d` is the Punycode equivalent of `测试`. Both address bars have a blue header with a white square icon on the left.

`www.nic.测试.`

`www.nic.xn--0zwm56d.`

# Lack of Support: Internationalized Email

X

Message

**Send**

From:

Francisco

To:

? 麻烦先生@导航.中国

Cc:

mistrouble@navigation.china

Subject:

Urgent! New project for you

# Universal Acceptance Initiative

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#ICANN51



# Universal Acceptance Initiative: Goals

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Universal support in applications and services for:

1. All TLDs
2. Internationalized Domain Names
3. Internationalized Email

# Universal Acceptance Initiative: Roadmap

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- Promote New TLDs, IDNs and Internationalized Email acceptance
- Foster discussion
- Support a “corporate memory” of progress
- Elevate awareness to the level of IPv6 and DNSSEC
- Supply a reporting tool for Universal Acceptance issues
- Be a catalyst, create a sense of urgency

# Universal Acceptance Initiative: Web Presence

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<http://bit.ly/universal-acceptance>

Additional content coming soon:

- Library of presentations
- Pointers to public reports
- Technical references

# Measuring Success

# Suggested Measurements

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- Suggested approaches include measuring adoption via testing applications and services
  - Need to overcome bias in:
    - Selecting the roster of tested applications and services
    - Tests themselves – applying a standard test may have inherent assumptions
- Maintaining a goal of being neutral raises the concerns over bias
  - Some other approach is needed

# Developing Measurements

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- **Self-assessments: a building block**
  - Statements specific to a class of services or applications that define what “universal acceptance” success is
  - Results of applying tests built to the self-assessments can be analyzed (recognizing that there may be a bias)
- **Have ideas?**
  - Looking for suggestions, other measures and ways to mitigate concerns about bias

# Leading by Example

# Universal Acceptance Support within ICANN

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- Adding clauses to ICANN's standard contractor agreement to request support for:
  - All TLDs
  - Internationalized Domain Names (IDNs)
  - Internationalized Email
- Working on a plan to upgrade internal systems to operate in accordance with the goals of Universal Acceptance

# DNS Industry Support Imperative

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Industry must first operate in accordance with the goals of Universal Acceptance before we can expect others to do so

- Supporting all TLDs, IDNs and Internationalized email means addressing:
  - Name servers
  - Contact email addresses
  - Business using IDNs and Internationalized Email
  - Back-office systems
- Educate Registrants
  - E.g., where to send bug reports

# Panel Discussion

## Challenges and Solutions for Universal Acceptance

الدولية

διεθνείς

alþjóðleg

ระหว่างประเทศ

**internationalized**

международный

国際的な

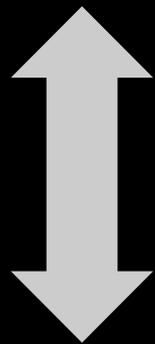
בינלאומי

अंतरराष्ट्रीय

**email addresses**

<http://пример.рф/elho?load>

http://пример.рф/elho?load



xn--e1afmkfd.xn--p1ai

сorgісrazy@пример.рф

corgicrazy@пример.рф

corgicrazy@xn--e1afmkfd.x



corgicrazy@пример.рф

corgicrazy@пример.рф



corgicrazy@пример.рф

loren != LOREN

“polar bear”

tesla+Model\_S!





Борис@пример.рф

xn--90aorig@xn--e1afmkfd.

xn--90aorig@xn--e1afmkfd.







corgicrazy@example.com



corgicrazy@example.com



المستعمل @ موقع شبكة



corgicrazy@example.com



المستعمل@موقع.شبكة



موقع.شبكة@corgicrazy

موقع شبكة @corgicrazy.co



# Multi-language Email Addresses (EAI)

# What is the multi-language email address?

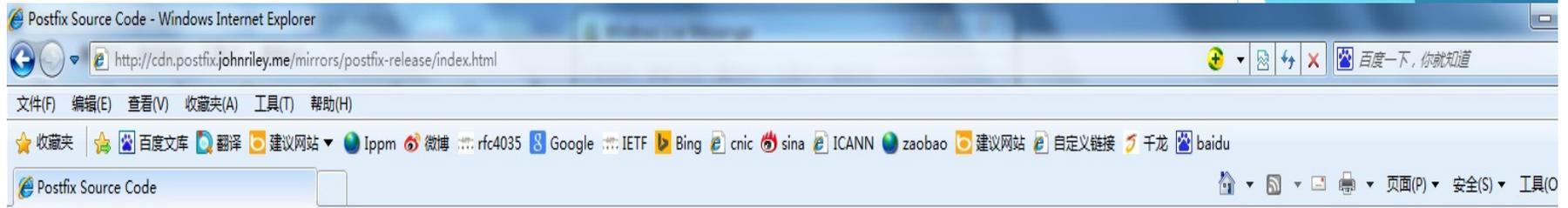
eg. اختبار@اختبار.  
परीक्षा@उदाहरण.in  
例え@例え.jp  
실례@실례.kr  
用戶@中文.cn  
été@Économie.fr  
teuer@Schön.de  
опыт @ опыт.ru

# It is the International Standard



- IETF RFC6530 Framework
- IETF RFC6531 SMTP extension
- IETF RFC 6856 POP extension
- IETF RFC 6855 IMAP Extension
- IETF RFC6532 Email Header
- IETF RFC6533 Delivery Status and Disposition Notifications

# Postfix supports EAI in July, 2014



## Postfix 2.12 preliminary EAI support

Postfix EAI support is a work in progress. Initial development by Arnt Gulbrandsen was sponsored by CNNIC.

- Postfix 2.12-20140316-eai preliminary release [Source code](#) | [PGP signature](#) | [Patch](#) | [PGP signature](#)

## Past stable releases (still supported)

### Postfix 2.10

- Postfix 2.10 Datelevel 3 [Source code](#) | [PGP signature](#) | [Release notes](#) | [Change log](#)





## POSTFIX

### QUICK LINKS

- [Home](#)
- [Announcements](#)
- [Non-English Info](#)
- [Feature overview](#)
- [Web sites \(text\)](#)
- [Download \(source\)](#)
- [Mailing lists](#)
- [Press and Interviews](#)
- [Documentation](#)
- [Howtos and FAQs](#)
- [Add-on Software](#)
- [Packages and Ports](#)
- [Becoming a mirror site](#)

Search

# Please choose a Postfix Download Site

[Mirror status report](#)

## Europe

### [Multiple locations](#)

- [Austria, Vienna](#)
- [Finland, Tampere](#)
- [France, Paris](#)
- [France, Strasbourg](#)
- [Germany, Bayern](#)
- [Germany, Berlin](#)
- [Germany, Berlin](#)
- [Germany, Berlin](#)
- [Germany, Duesseldorf](#)
- [Germany, Frankfurt am Main](#)
- [Germany, Goettingen](#)
- [Germany, Hamburg](#)
- [Germany, Hamburg](#)
- [Germany, Munich](#)
- [Greece, Athens](#)
- [Ireland, Dublin](#)
- [Latvia, Riga](#)
- [Netherlands, Amsterdam](#)
- [Netherlands, Haarlem](#)
- [Netherlands, Utrecht](#)
- [Norway, Oslo](#)

- [Romania, Bucharest](#)
- [Romania, Bucharest](#)
- [Russia, Saint Peterburg](#)
- [Russian Federation, somewhere](#)
- [Slovenia, Ljubljana](#)
- [Spain, Bilbao](#)
- [Spain, Malaga](#)
- [Sweden, Falkenberg](#)
- [Sweden, Uppsala](#)
- [Switzerland, Basel](#)
- [Switzerland, Zuchwil](#)
- [UK, London](#)
- [UK, somewhere](#)

## North America

- [Multiple locations](#)
- [Canada, Alberta, Edmonton](#)
- [USA, FL, Homestead](#)
- [USA, NY, New York](#)
- [USA, NY, White Plains](#)
- [USA, PA, Philadelphia](#)
- [USA, PA, Pittsburgh](#)
- [USA, somewhere](#)

[Wietse's own site](#)

## Central America

[Costa Rica](#)

## South America

- [Brazil, Sao Paulo](#)
- [Brazil, Campinas](#)
- [Brazil, somewhere](#)

## Africa

[South Africa](#)

## Middle East

[Iran, Tehran](#)

## East Asia/Pacific

- [Multiple locations](#)
- [Australia, Brisbane](#)
- [Australia, Melbourne](#)
- [Australia, somewhere](#)
- [China, Hong Kong](#)
- [Japan, Kyoto](#)
- [Japan, Shizuoka](#)
- [South Korea, Seoul](#)
- [Taiwan, NSYSU CDPA](#)
- [Taiwan, Providence](#)

# GMAIL supports EAI in Aug, 2014

The screenshot shows a Gmail inbox in a Chinese browser. The email header shows the sender as 'Jiankang Yao' with the email address '<姚健康@互联网中心.中国>' highlighted in an orange box. An orange arrow points from this box to a text box at the bottom of the page that reads 'Gmail receives the message CNNIC's EAI account'. The browser's address bar shows the URL 'https://mail.google.com/mail/#inbox/147a8e941ba71b97'. The browser's menu bar includes '文件(F)', '编辑(E)', '查看(V)', '收藏夹(A)', '工具(T)', and '帮助(H)'. The browser's toolbar includes '收藏夹', '百度文库', '翻译', '建议网站', 'Ippm', '微博', 'rfc4035', 'Google', 'IETF', 'Bing', 'cnic', 'sina', 'ICANN', 'zaobao', '建议网站', '自定义链接', '千龙', and 'baidu'. The browser's tabs include '中国互联网络信...', 'Installing and ...', 'Official Googl...', 'Official Googl...', 'Official Gmail ...', 'http://google...', '谷歌中文邮...', '创建您的 Goo...', and '中国互联网络信...'. The Gmail interface shows the 'COMPOSE' button, the 'Inbox (67,330)' label, and the email content 'test'.

谷歌中文邮件 - healthyao@gmail.com - Gmail - Windows Internet Explorer  
https://mail.google.com/mail/#inbox/147a8e941ba71b97

文件(F) 编辑(E) 查看(V) 收藏夹(A) 工具(T) 帮助(H)

收藏夹 百度文库 翻译 建议网站 Ippm 微博 rfc4035 Google IETF Bing cnic sina ICANN zaobao 建议网站 自定义链接 千龙 baidu

中国互联网络信... Installing and ... Official Googl... Official Googl... Official Gmail ... http://google... 谷歌中文邮... 创建您的 Goo... 中国互联网络信...

Google

Gmail

COMPOSE

Inbox (67,330)

Starred

Important

Connecting...

Unable to reach Gmail.

谷歌中文邮件

Inbox x

Jiankang Yao <姚健康@互联网中心.中国>

9:22 AM (2 hours ago)

test

Gmail receives the message CNNIC's EAI account

Washington Un  
LL.M. in U.S. La

# This is our future email address?

eg. اختبار@اختبار

example@example.com

परीक्षा@उदाहरण.in

例え@例え.jp

실례@실례.kr

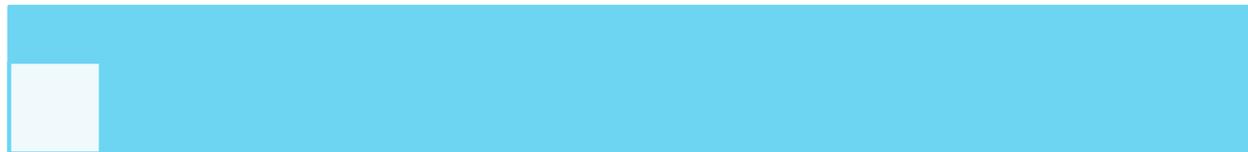
用户@中文.cn

été@Économie.f  
r

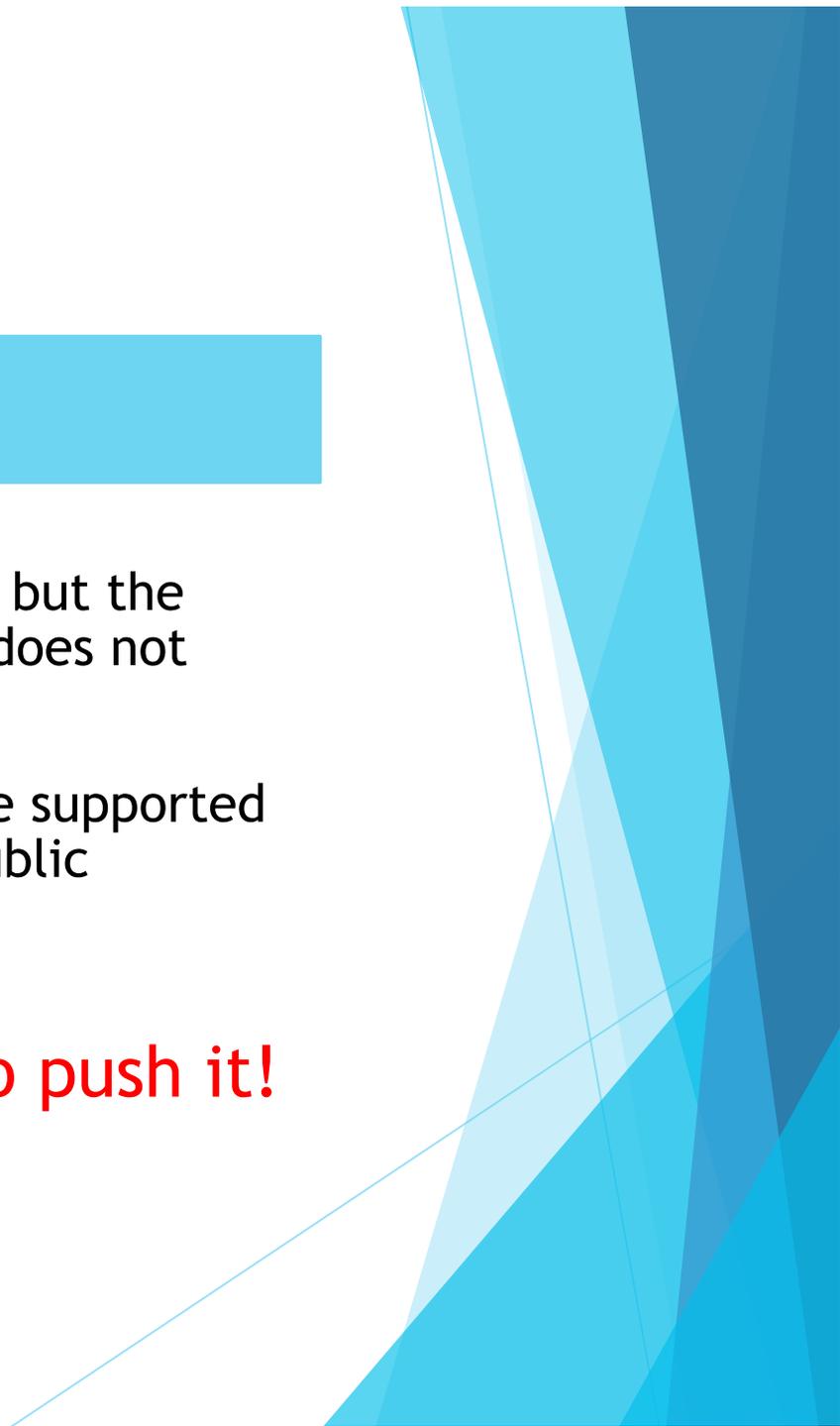
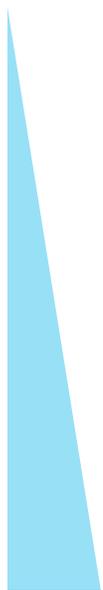
teuer@Schön.de

опыт @ опыт.ru

# Problems



- Some servers have supported EAI, but the major client such as outlook still does not support EAI!
- Some email service providers have supported EAI, but there are still no free public registration of EAI.
- We must do something to push it!**



# APEC EAI deployment meeting in Beijing

- Aug. 2013, APEC approves the project “Deployment of Multi-language email Address Technology”
- Sep. 2013, We holds the workshop for this project in APEC TEL 48 in Hawaii, USA
- 30 and 31 Oct. 2014, We will host the APEC EAI workshop in Beijing.

▶ WELCOME TO JOIN IT!

# Meeting Venue: Legendale Hotel Beijing





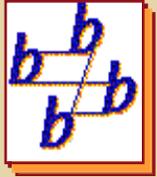


- **Meeting:**
  - Deployment of Multi-language email Address Technology
- **Date:**
  - 30 and 31 OCT. 2014
- **Speakers:**
  - from Internet Society of China/MIT/CAS/State Internet Information Office/CNNIC/CONAC/APEC/ICANN/IETF/domain registry/Email service providers/ ...
- **Participants:**
  - email related service providers and users, domain related registry and users, any interested Multi-language email Address users from APEC regions, media and reporters



If you are interested in joining it, please kindly contact

- **Dr. Jiankang YAO**  
([yaojk@cnnic.cn](mailto:yaojk@cnnic.cn))

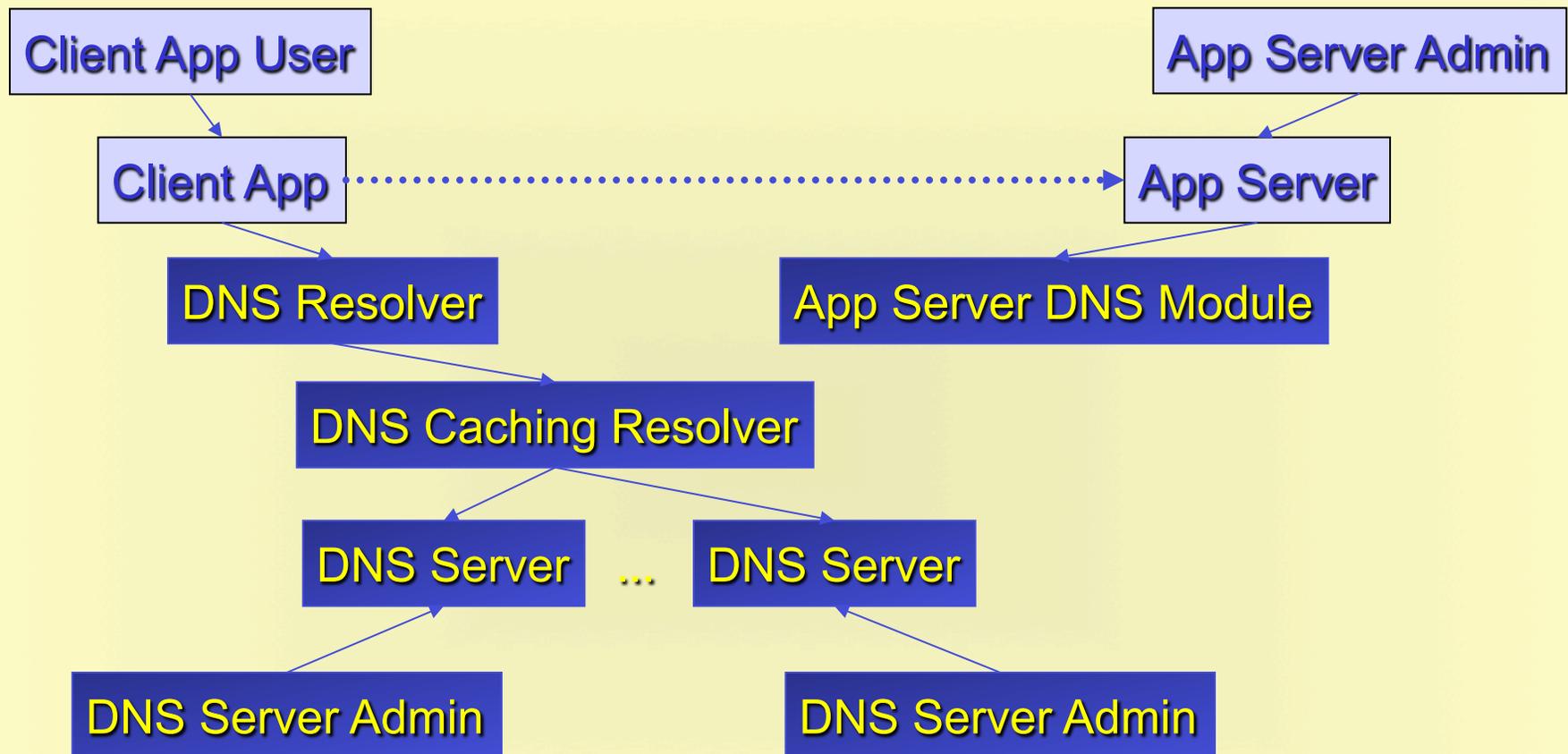


# Changing DNS Infrastructure: *TLD, DNSSec, IDN, RR...*

**D. Crocker**

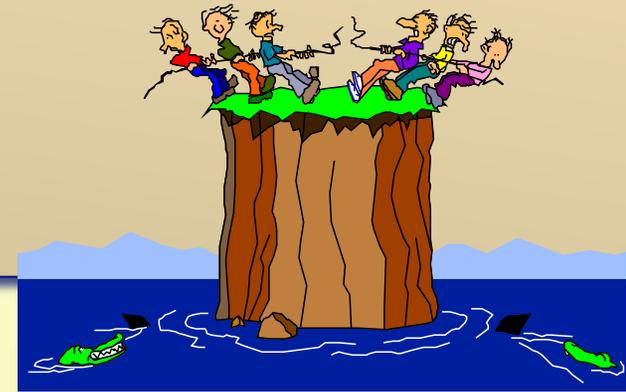
Brandenburg InternetWorking  
bbiw.net

# Components



# Independent Actors

*Use requires adoption by all*



User



Client  
Ops



Client  
Developer



App Server  
Developer



App Server  
Ops



Server  
Provider



DNS Server  
Ops



DNS Server  
Developer

...



DNS Server  
Developer



DNS Server  
Ops



# For each actor...



- **Who is in the critical usage path?**
- **What is their specific effort, needed to accomplish adoption?**
- **What is the specific, immediate, business incentive (benefit) that will drive their adoption (justify the cost)?**



# GDD + Related Sessions

## Thursday, 16 October

- DNSSEC Key Rollover Workshop
- Thick WHOIS Implementation (Working Session)
- Deploying the IETF's WHOIS Replacement

# Engage with ICANN on Web & Social Media



[twitter.com/icann](https://twitter.com/icann)



[gplus.to/icann](https://plus.google.com/icann)



[facebook.com/icannorg](https://facebook.com/icannorg)



[weibo.com/icannorg](https://weibo.com/icannorg)



[linkedin.com/company/icann](https://linkedin.com/company/icann)



[flickr.com/photos/icann](https://flickr.com/photos/icann)



[youtube.com/user/ICANNnews](https://youtube.com/user/ICANNnews)



[icann.org](https://icann.org)