

Raseel (رسيل) Arabic Emails

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Presented by ...

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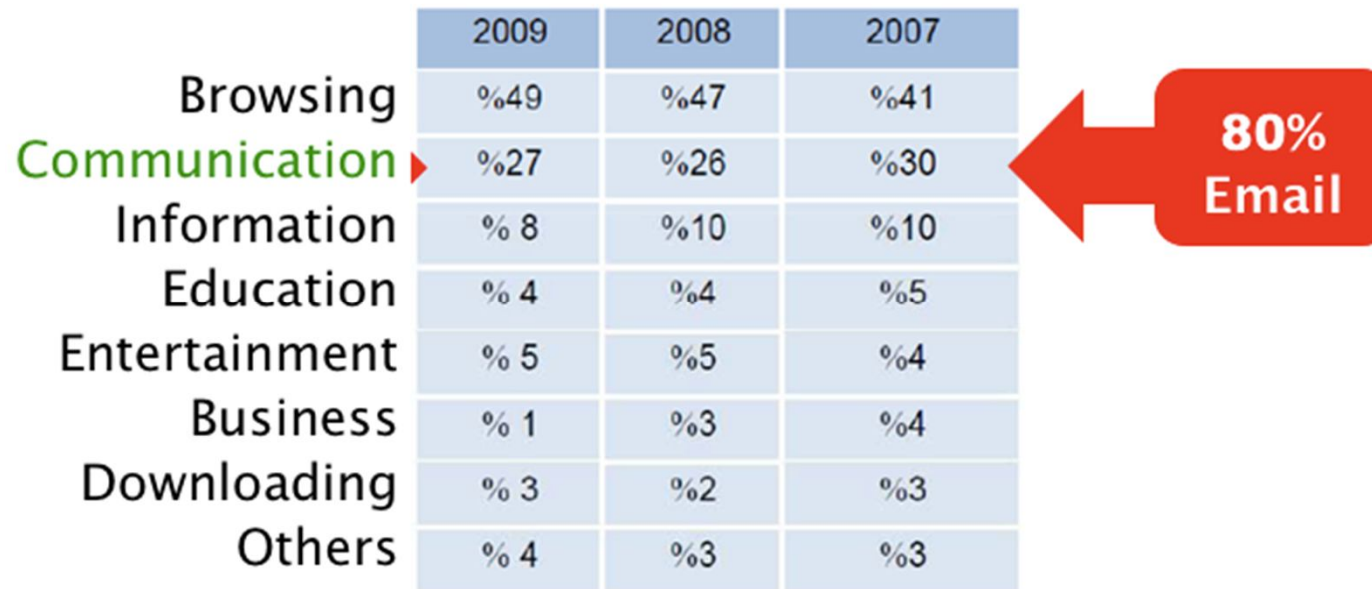


International Emails

- Why do we need International Emails?
 - Language and cultural barriers.
 - Much convenient.
 - Why not? IDN already out there.



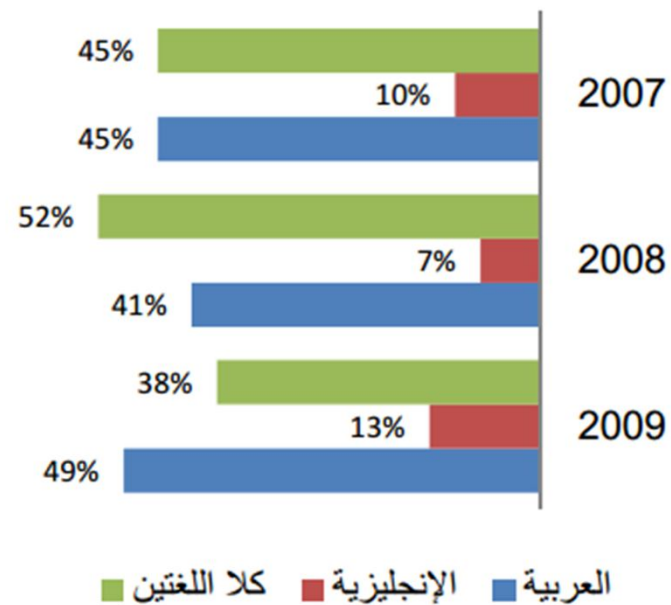
IDN Applications*



*source : CITC study <http://www.citc.gov.sa/>



Arabic sites more popular than other *



*source : CITC study <http://www.citc.gov.sa/arabic/Reportsandstudies/Studies/Docu>



Current Situation

- Email addresses use ASCII letters
username@example.com
- E-mail protocols are based on ASCII
 - IMAP
 - POP3
 - SMTP



The Goal

Arabic: مثال@موقع.السعودية
Ukrainian: юзер@екзампл.ком
Greek: θσερ@εχαμπλε.ψομ



International Emails

- Any email address consists of **identity @ hostname**
- IDN solves a half of the problem.
- We need to work on the other half



Our Mission

- Supporting Arabic letters in identity part

موقع.السعودية@identity

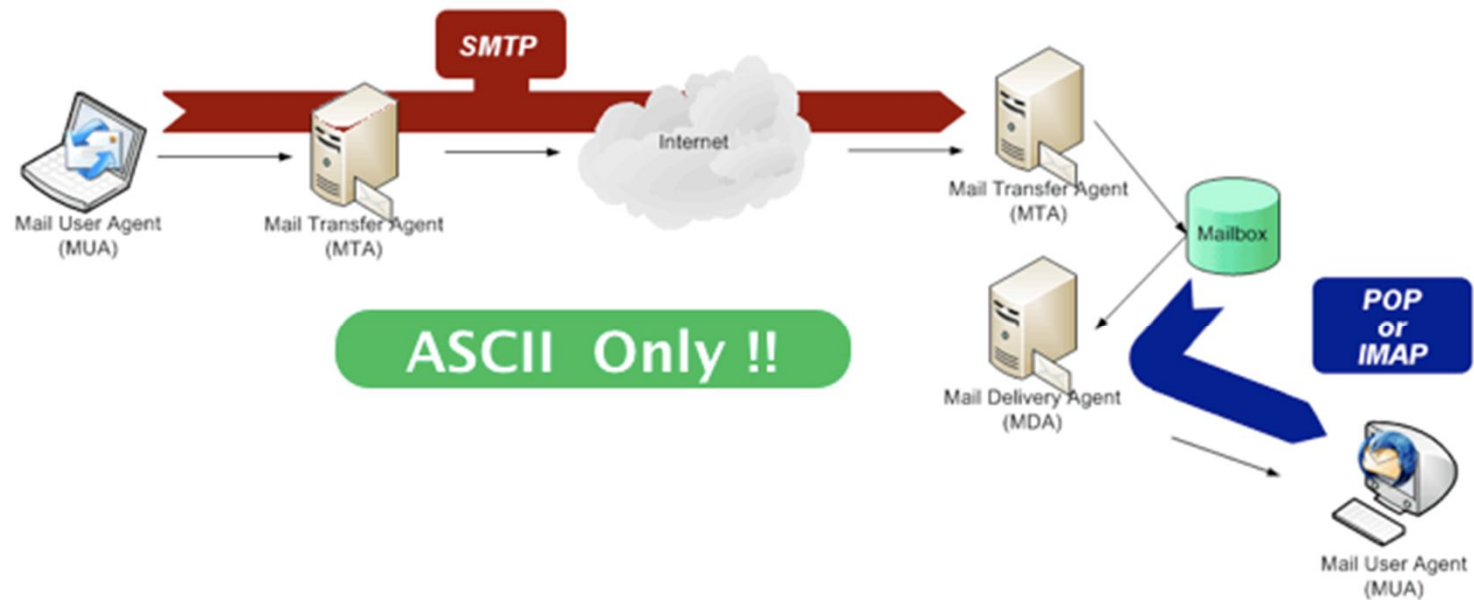


مثال@موقع.السعودية





Current Situation of Protocols





Current Situation of Protocols

- In RFC2047 , MIME defines an encoding mechanism for some specific message header fields to accommodate non-ASCII data.
- It does not permit the use of email addresses that include non-ASCII letters.



Suggested Solutions

- Using Unicode letters in all parts of email message.
- Adding extra extensions to the current protocols to support Arabic letters in email.
- Using the same technique that's been used for IDN



First Solution

- Changing email headers to support Unicode?
 - The presence of UTF-8 letters in email headers is not easy since most, if not all, email servers do not support that.



Second Solution

- Adding extra extensions to :
 - IMAP
 - POP3
 - SMTP
- these extensions allow us to send and receive emails using email addresses written in any language.
- See:
Overview and Framework for Internationalized Email (RFC4952)



Third Solution

- Using Punycode to convert the identify part of the email address from Unicode to ASCII.
- It's the same technique that's been used for IDN.



Raseel

- Raseel (Arabic Emails) based on Punycode.

مثال @رسيل.السعودية

IETF Punycode
RFC 3492

xn--mgbh0fb@xn--wgbe5cxa.xn--mgberp4a5d4ar

ASCII

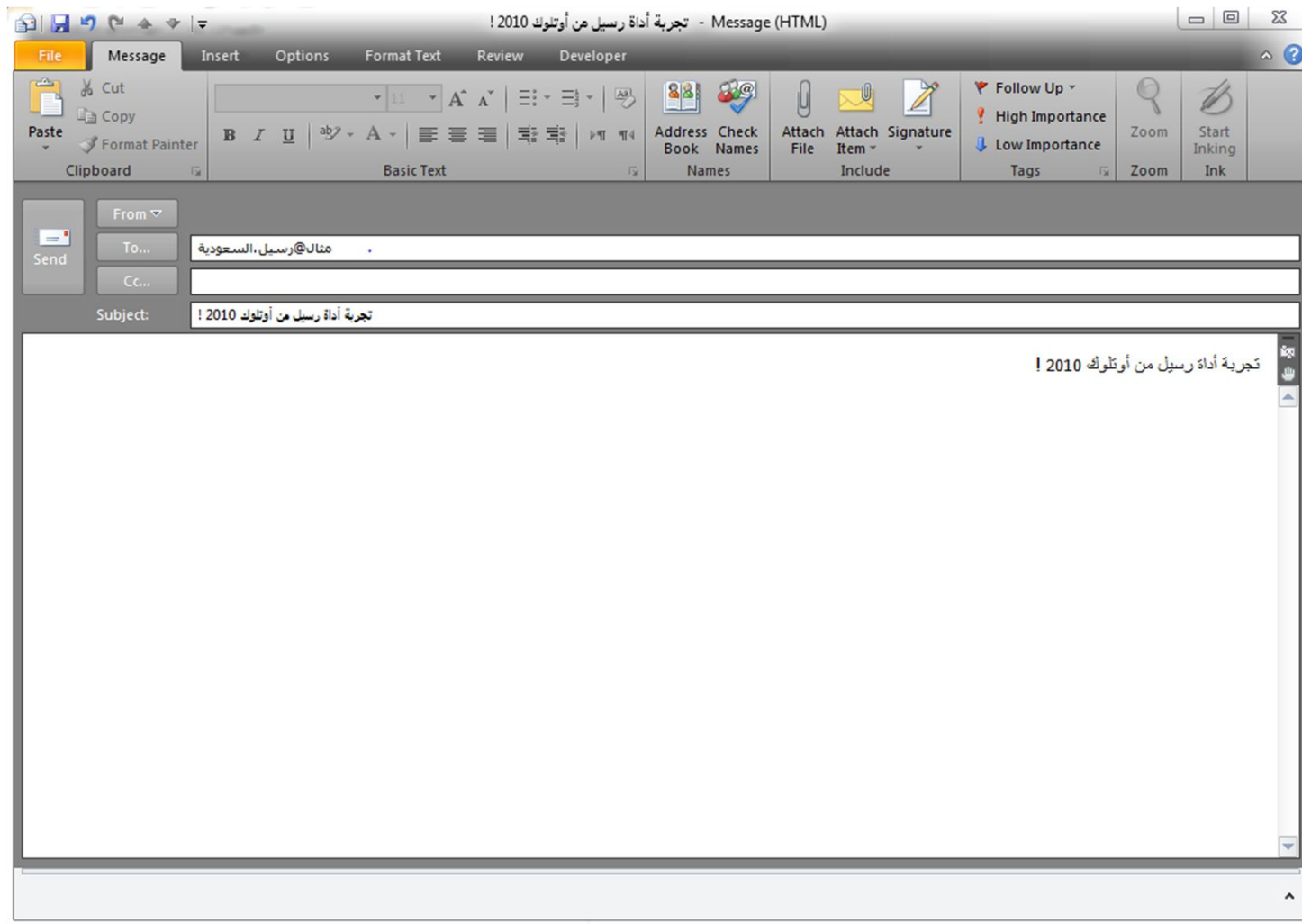


Raseel Components:

- Punycode convertor that convert Unicode to Punycode and vise versa.
- Outlook plugin
- Web mail Plugin
- Usernames (identity part of the email) are stored as Punycode in the email server.



Arabic Emails in Outlook





Raseel, Official Website

رسيل السعودية



ساهم معنا برأيك

لقطات

بريد رسيل

أداة رسيل

الشروط و الأحكام

كيف أشارك

الأسئلة الشائعة

عن المشروع

مشروع رسيل

مشروع رسيل هو ثمرة الإتفاقية التي أبرمتها هيئة الاتصالات وتقنية المعلومات مع مدينة الملك عبدالعزيز للعلوم والتقنية في مجال البحث والتطوير في أسماء النطاقات العربية وهو يهدف إلى فهم متطلبات تقديم خدمة البريد الإلكتروني بالعناوين العربية و التحديات التي قد تعوق ذلك من خلال بناء موقع وأدوات لتقديم أهم الخدمات الأساسية المتعارف عليها في البريد الشبكي .

ابدأ مع بريدك العربي



The Next Step

■ Raseel 2

- Develop more client/server tools to support Arabic emails (as mobile, web and desktop applications)
- Look at other mechanisms to support Arabic Emails other than Punycode.



More Info

- رسيل.السعودية
- <http://nic.sa>

Thank you.



Saudi IDN: Letter occurrence

Number of Letter occurrence in all strings (letter count)

