



IDN SDK from i-DNS.net

Internationalized Domain Names Software Development Kit

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Topic

- Confusion of IDN
- Problem & Solution – IETF IDNA
- i-DNS.net IDN SDK
- Examples of IDN SDK implementation
- Questions & Answers



Confusion of IDN



Internationalized Domain Names

华人.公司.cn

華人.商業.tw

高島屋.会社.jp

삼성.회사.kr

三星.회사.kr

الاهرام.م

viag @ie.qc.ca

ישראל.קום

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現代.com

ヤフー.com



Confusion

- Language and Script
 - A language is a way that human interact

 - A script is the written form of a language
 - Many written languages share the same script
 - Some written languages use more than one script

- Example, 現代.com
 - is this in Chinese, Japanese or Korean?



Confusion

- Internationalization, Localization and Multilingualism
 - Internationalizing make the protocol able to handle more scripts
 - Localization involves tailoring interaction with users in the languages they know
 - Multilingualism makes the protocol able to handle multiple languages

- “I” in IDN is Internationalization



Confusion

- Name and Identifier
 - Name is a word or phrase that constitutes the distinctive designation of a person or thing
 - Identifier is a string of characters that uniquely identify a person or thing

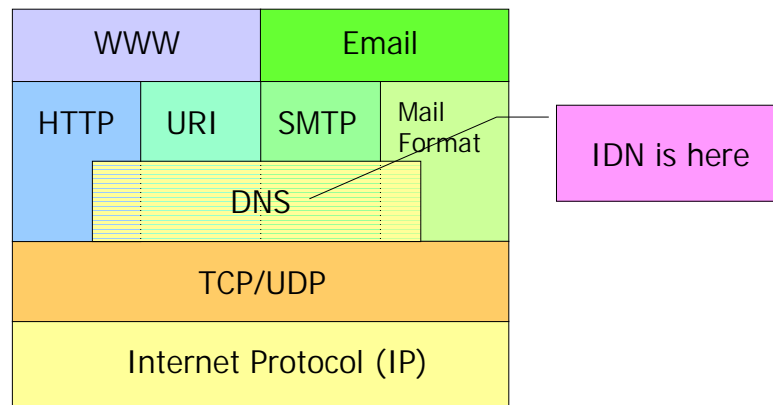
- Example
 - “James Seng” is a Name
 - “jseng” is an Identifier
 - is jseng.com a Name or Identifier?

- Domain Name is an Identifier not a Name



Problem & Solution IETF IDNA

Why is IDN difficult?



Snapshot of network layers to provide some Internet Service

Problems

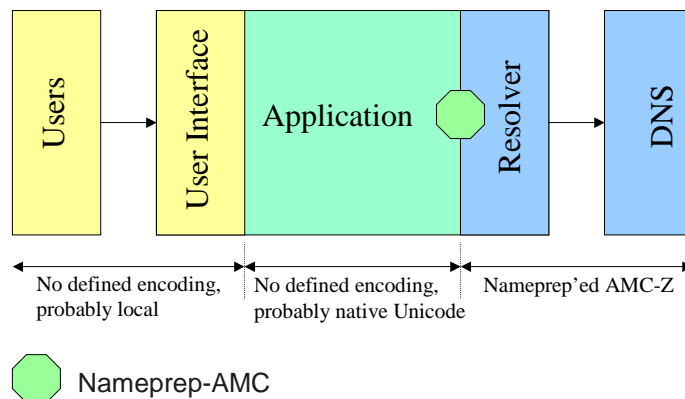
- **Stability**
 - IDN is changing a fundamental service in the Internet Architecture
- **Backward Compatibility**
 - A lot of existing Internet Protocols, applications uses domain names and assumed that it is A-Z, 0-9 and "-" only
- **Easy of Use**
 - It should transparent to user if possible

Problems

- Internationalization
 - Using one universal character set or multiples characters set? What encoding?
 - ISO/IEC 10646 aka Unicode for character set and ACE-AMC-Z (draft-ietf-idn-amc-z) for encoding.
- Matching
 - ヤフー.jp = ヤフー.com
 - Nameprep (draft-ietf-idn-nameprep), an adoption of case folding (UTR#21) and Normalization Form KC (UTR#15) from Unicode Consortium.

IDN SDK and IDNA

- IDNA-Nameprep-ACE Model





i-DNS.net IDN SDK



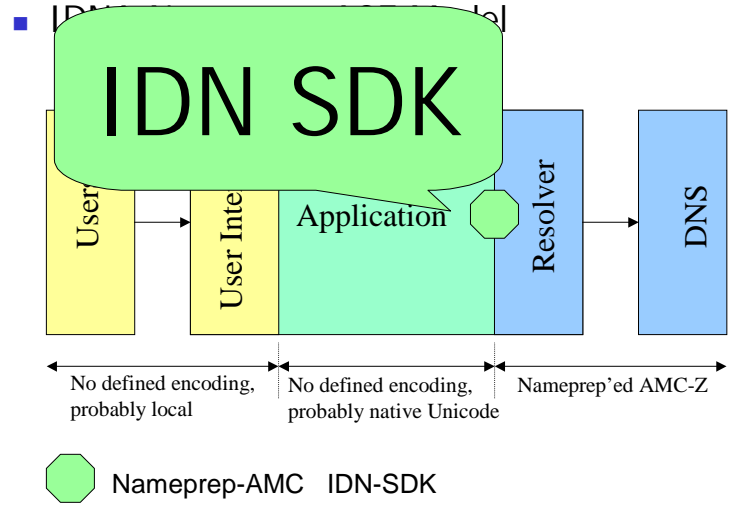
What is IDN SDK?

- Enable IDNA-Nameprep-ACE in your applications conform to IETF standard
- Integrate easily with applications with simple API
- Multi-platform API (Support Unix, to Windows to Mac, either in C, Java or Perl and XPCOM)

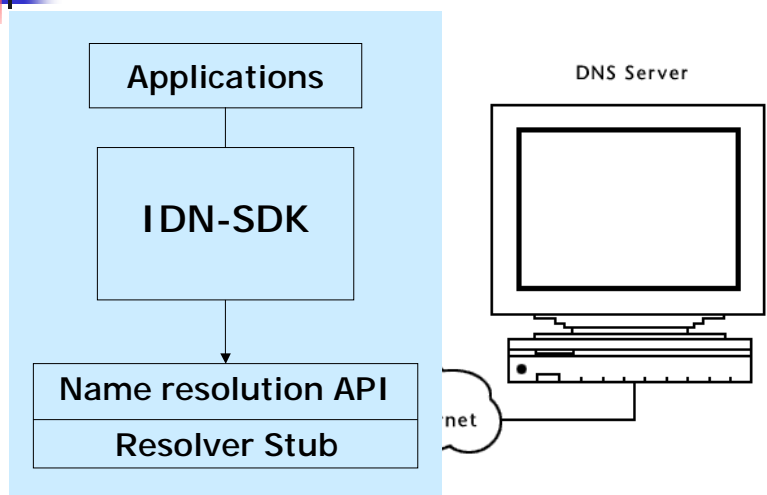
Free for application developers

Download: <http://tech.i-dns.net/sdk/>

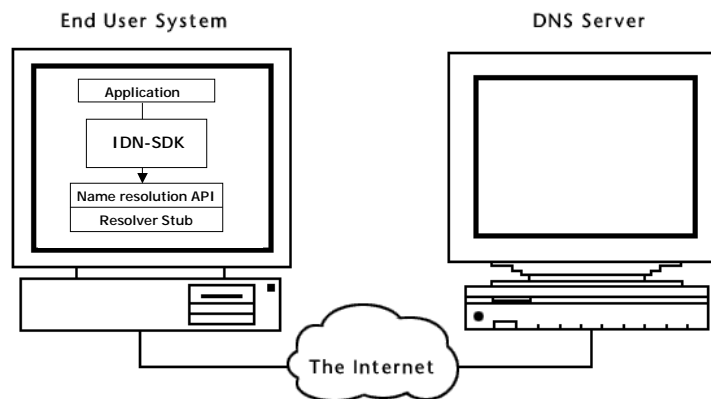
IDNA



How does IDN SDK work?



How does IDN SDK work?



Possible uses of IDN SDK

- Web browser
 - Client: IE, **Mozilla**/Netscape, Opera
 - Mobile: i-Mode, J-Phone, Palm

- Email Client
 - Client-based: Eudora, Outlook
 - Web-based: Hotmail
 - Mobile: i-Mode, J-Phone, Palm

- Enhanced applications
 - **iClient**

Examples of IDN SDK implementation



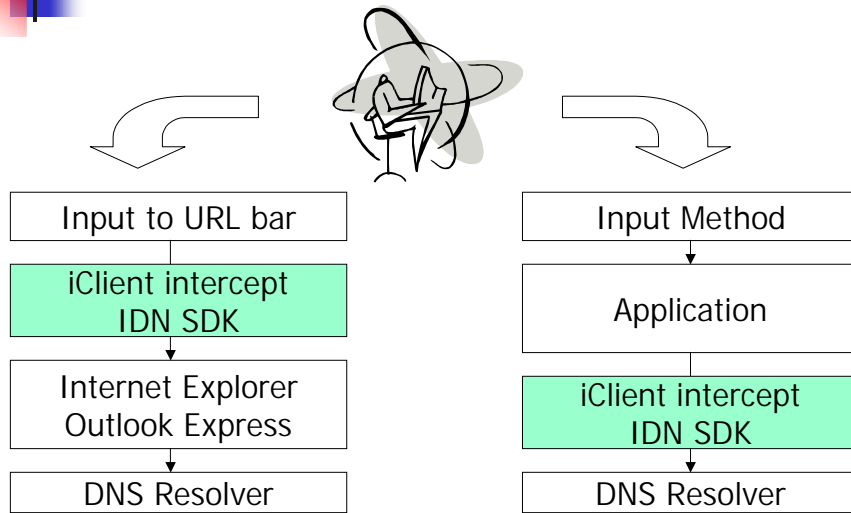
IDN SDK & iClient

- Based on IDNA
 - Support Win98/ME/2000/XP
 - Works with IE/Netscape/Outlook/Eudora and also most applications
 - Support for I18N Email

- iClient++ with IME
(Input Method Engine)

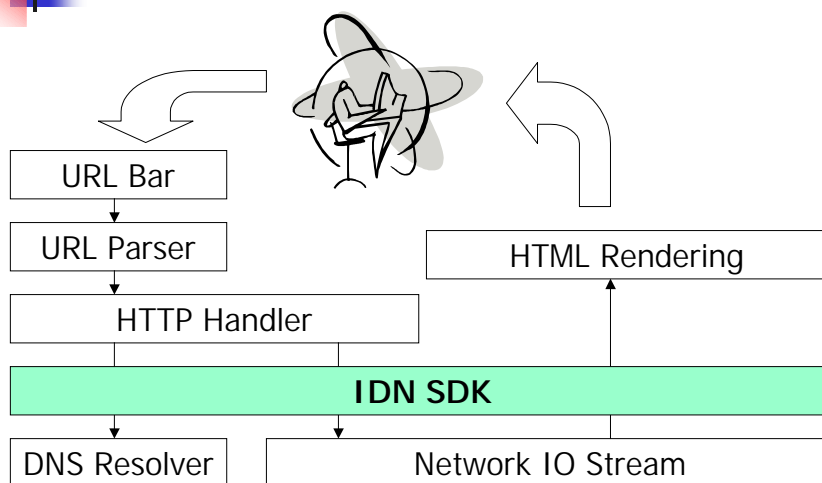


IDN SDK & iClient

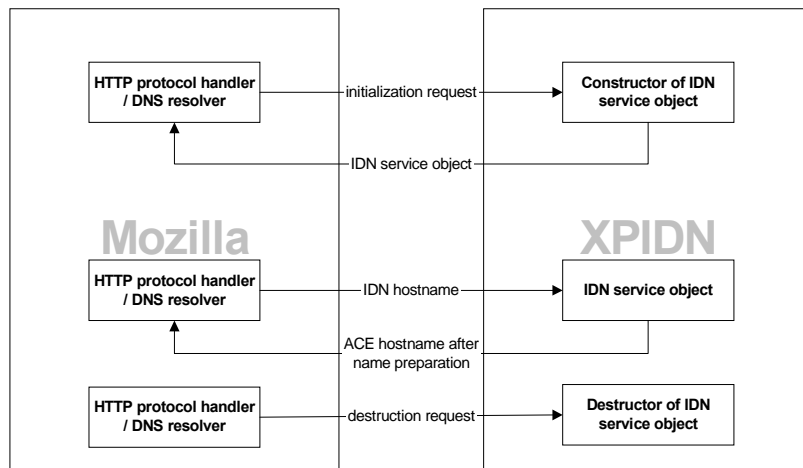


http://www.i-dns.net/support_download/downloads/iClient/iClient.html

IDN SDK & Mozilla



IDN SDK & Mozilla



IDN SDK & Mozilla

- Download and install latest Mozilla (0.9.6)
 - <http://www.mozilla.org/releases/>
- Using the newly installed Mozilla, go to
 - <http://playground.i-dns.net/mozilla/xpidn/> and install XPIDN by following the instruction
- Try out some samples
 - <http://playground.i-dns.net/mozilla/samples/>

