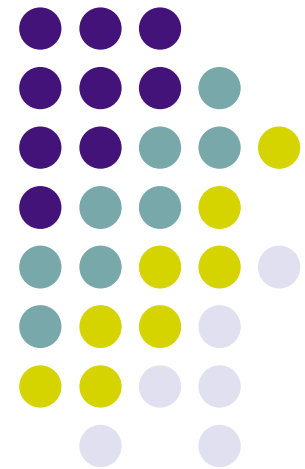


History of IDN

APNIC Beijing 2009

James Seng





Internationalized Domain Names

**Clickable links,
should work in all browsers.**

- <http://مثال.إختبار>
- <http://例子.测试>
- <http://例子.測試>
- <http://παράδειγμα.δοκιμή>
- <http://उदाहरण.परीक्षा>
- <http://例え.テスト>
- <http://실례.테스트>
- <http://مثال.آزمایشی>
- <http://пример.испытание>
- <http://உதாரணம்.பரிட்சை>
- <http://בשיל.טעסט>

**For pasting or typing,
requires full IDN support.**

- <http://مثال.إختبار>
- <http://例子.测试>
- <http://例子.測試>
- <http://παράδειγμα.δοκιμή>
- <http://उदाहरण.परीक्षा>
- <http://例え.テスト>
- <http://실례.테스트>
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- <http://пример.испытание>
- <http://உதாரணம்.பரிட்சை>
- <http://בשיל.טעסט>

Script

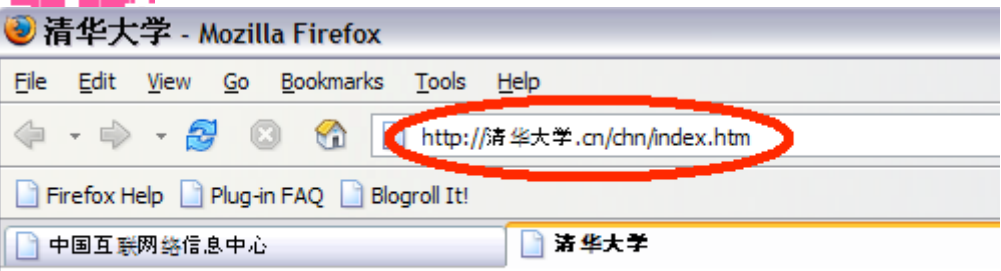
- Arabic
- Simplified Chinese
- Traditional Chinese
- Greek
- Devanagari
- Kanji, Hiragana, Katakana
- Hangul
- Perso-Arabic
- Cyrillic
- Tamil
- Hebrew

Language

- Arabic
- Chinese
- Chinese
- Greek
- Hindi
- Japanese
- Korean
- Persian
- Russian
- Tamil
- Yiddish



Example of IDN





Significant of IDN

- Large number of population in Asia Pacific are not native English speakers
 - An English-only Internet is no longer viable
- Names are often used in DNS identifiers
 - Do you want to write your name in English?
- Matter of culture diversity and identity

IDN in the Early Days



- 12/96 Martin Dürst's original Internet Draft
- 03/98 Early research in IDN @ National University of Singapore
- 07/98 Asia Pacific Networking Group iDNS Working Group
- 02/99 iDNS Testbed launch across CN/JP/KR/TW/TH/HK/SG**
- 06/99 IDRC funded Center of Internet Research
- 07/99 UTF-5 proposed by J. Seng, M. Dürst and TW. Tan



IDN standardization

- 11/99 IETF IDN Birds-of-Feather
- 01/00 IETF IDN Working Group formed by J. Seng & M. Blanchet
- 07/00 Formation of MINC and JET and CDNC
- 03/01 ICANN Board IDN WG formed
- 11/01 ICANN IDN Committee formed
- 12/01 ITU-WIPO-MINC Symposium
- 10/02 ICANN IDN Workshop
- 12/02 ITU Plenipotentiary Resolution 133
- 03/03 RFC 3454, 3490, 3491, 3492 published**
- 06/03 ICANN IDN Guidelines
- 05/04 RFC 3743 (aka JET CJK Guidelines) published**



IDN in ICANN

- 06/06 Workshop on IDN @ ICANN Morocco
- 11/06 GNSO IDN Working Group chaired by Ram Mohan
- 12/06 ICANN discussion of IDN trial at the root
- 03/07 GNSO IDN Working Group completes work
- 10/07 ICANN started IDN trial in the root started
- 01/08 ICANN successful Evaluation of IDN in the root
- 04/08 IETF IDNAbis Working Group formed chaired by V. Cerf
- 06/08 ICANN agreed to Fast Track IDN ccTLD
- 10/08 ICANN GTLD Application Guidebook allowing IDN GTLD



IDN in the Future

- ICANN will Fast Track IDN CCTLD in 2009, hopefully we will see .中国 or .日本 by ccTLD operators in 2010
- ICANN will allow IDN GTLD Application in Q1 2010 and hopefully first commercial IDN GTLD will start in 2011



THANK YOU