

Email Address Internationalization (EAI) and Internationalized Domain Names (IDN)

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Man with many hats

Back in the old days...

- Had international *content*, but not addresses
- One of my first email addresses was pwrg6481@uxa.cso.uiuc.edu
 - Local part (pwrg6481) - Unix login identifier
 - Domain name:
 - uxa Unix system “A”
 - cso Computing Services Office
 - uiuc University of Illinois Urbana-Champaign
 - Just easy to remember
 - Just protocol elements: **Not** “names”

Then came the web (before Google)

- Domain names now identify organizations
 - No search
 - Want on “side of the bus”
 - Want “Close enough” to guess
- Email address becomes “my name”
 - Want memorable
 - Want typeable
- How do we “fix” this in the IETF?

Internationalized Domain Names (IDN)

- Make easy to guess/type for non-ASCII
 - No new service; too hard to create
 - No new DNS; too much existing code
 - Solution: Hack it into existing DNS
 - Encode in ASCII
 - Not “architecturally pure”, but “pragmatic”
- Working group formed in IETF
 - Chaired by people from Singapore and Québec
 - Participation international
 - Compromises made and standards deployed
- Note: IETF tries to avoid politics of IDN

Email Address Internationalization (EAI)

- Want easy-to-type email address
- Different from IDN
 - Some infrastructure; more clients
 - Want easy programming
- Developed in IETF
 - East Asia leads the work – New participants
 - Started “Experimental”
 - Now finishing “Standards”
 - Unicode (UTF-8) everywhere in messages