Internet Corporation for Assigned Names and Numbers

Louis Touton

Presentation to the FTAA Joint Public-Private Sector Committee of Experts on the Internet Corporation for Assigned Names and Numbers

14 June 1999

Background

Origins of the Internet

- Research oriented
- US Government funded
 - DARPA
 - NSF
- Government contractors
 - Network Solutions
 - IANA project at USC-ISI

Internet Protocol (IP) Address System

- Unique identification of computers on Internet (e.g., 128.9.128.127)
- Delegated allocation
 - IANA
 - RIRs
 - ISPs
- Current system (IPv4) mostly allocated
- New system (IPv6) being deployed

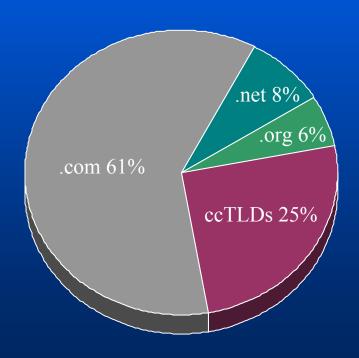
Domain Name System (DNS)

- Easy-to-remember names (e.g., icann.org)
- Translated to IP addresses by nameserver system
- Hierarchical naming system
- gTLDs (.com, .edu, .int, .net, .org)
- ccTLDs (.ar, .br, .ca, .mx, .us)

Domain Names and the Domain Name System: Statistics

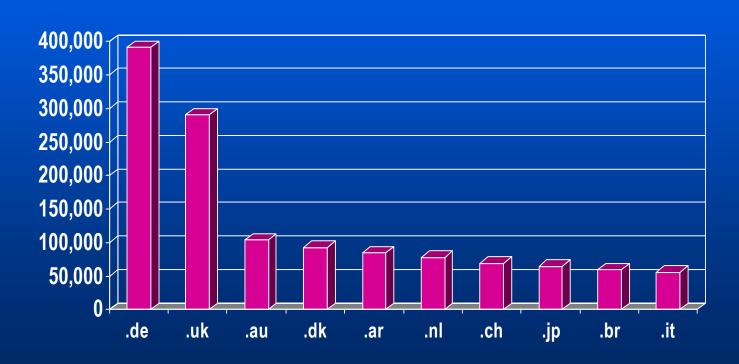
- Total Domain Names Worldwide: 8,196,117
 - .com 4,967,688
 - net 683,652
 - .org 474,230
 - ccTLDs 2,064,229
- Growth Rate: 40,000 new registrations per week!
 - % of non-us registrations in gTLDs on the rise

Distribution of Registrations in Top Level Domains



Domain Names and the Domain Name System: Statistics

Number of Registrations in the top 10 ccTLDs



Internet Standards

- Standards-setting organizations
 - IETF
 - W3C
 - ITU-T
- Protocol number assignment
 - Internet Assigned Numbers Authority (IANA)

Need for Change

- Dissatisfaction with lack of competition
- Trademark/domain-name conflicts
- Need for more formalized management structure
- Globalization of Internet
- Commercialization of Internet
- Need for accountability

White Paper Principles

- Stability
- Competition
- Private, bottom-up coordination
- Representation

White Paper Implementation

- Internet community to form non-profit corporation
 - Global and functional diversity
- US Government (through Commerce Department) to transition centralized coordination functions
- Amendment of Network Solutions agreement to require competitive registrars
- WIPO to recommend solutions for trademark/domainname dilemma

Structure of ICANN

ICANN Organization



Board of Directors

- Currently 10-member initial board
- Ultimately 19-member board
 - 9--selected by 3 supporting organizations
 - 9--selected at large
 - 1--President and CEO
- Geographic diversity required

Supporting Organizations

- Address Supporting Organization (ASO)
- Domain Name Supporting Organization (DNSO)
- Protocol Supporting Organization (PSO)

Domain Name Supporting Organization

- Names council (21 members)
- 7 constituencies
 - ccTLD registries
 - Commercial & business
 - gTLD registries
 - ISPs and connectivity providers
 - Non-commercial domain holders
 - Registrars
 - Trademark, intellectual property, and anti-counterfeiting interests
- General assembly
 - Working groups

Protocol Supporting Organization

- Structure being finalized
- Minimalist structure
- Members will be global internet standards organizations
 - IETF
 - W3C
 - ITU-T
 - ETSI
- Does not set standards, only mediates conflicts

Address Supporting Organization

- Application not yet received
- Expected members:
 - Regional address registries
 - APNIC
 - ARIN
 - RIPE
 - Perhaps ISP organizations

Advisory Committees

- Root Server System Advisory Committee
- Government Advisory Committee
- Membership Advisory Committee
- Independent Review Advisory Committee

ICANN Staff

- Currently very small
 - President
 - IANA staff (3 full-time)
 - Policy specialists (2 part-time)

Geographic and Cultural Diversity

- Geographically diverse board of directors
 - SO directors
 - At-large directors
 - Present geographic diversity being revised for workable implementation
- Geographically diverse councils
- Geographically diverse board meetings (Singapore, Berlin, Santiago, Los Angeles)
- Multiple languages

ICANN Activities

Board of Directors Activities--Organizational

- Finalization of PSO structure
- Awaiting ASO application
- Membership feasibility & implementation
- Search for permanent staff
- Financing of operations

Board of Directors Activities--Substantive

- Registrar accreditation for gTLDs
- WIPO report
- IPv6 introduction
- Root server system enhancements
- Arrangements with ccTLD operators

Domain Name Supporting Organization Activities

- Domain-name dispute resolution
 - Cybersquatting/cyberpiracy
 - Legitimate disputes
- Famous/well-known names
- gTLD expansion
- Best practices for registrars
 - Accurate contact information
 - Prepayment

gTLD Registrar Accreditation

- Prompt introduction of competition
- Split registry/registrar business model
- 7 October 1998 amendment to NSI cooperative agreement
- ICANN registrar accreditation policy (4 March 1999)
- Shared registration system testbed
 - 5 registrars
- Full and equal competition
 - 37 additional registrars

Address Activities

- IPv6 deployment
- IPv4 assignment reallocation
- New regional address registries

Protocol Activities

Continued IANA operation

Root Server System Advisory Committee Activities

- Y2000 compliance
- Formalization of root server operational procedures
- Establishment of contractual relationships
- Geographic dispersion of root servers

Government Advisory Committee

- Operating principles
- Filling out membership
- WIPO recommendations
- Recommendations regarding ccTLDs for dependent territories

How to Participate

- Private Sector
 - Participate in DNSO and its constituencies
 - Become an accredited gTLD registrar
 - Participate in open comment periods
- Governments
 - Participate on the Governmental Advisory Committee (contact GAC secretariat)
- Santiago, Chile ICANN meeting 24-26 August 1999
 - Information posted at http://www.icann.org