

CcTLDs and the Community: A Brief History of DNS Policy

John C Klensin
APTLD, Manila
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DNS Deployment Assumptions

- Originally
 - Generic Domains only
- Then
 - Countries pointing out that “admin hierarchy” model implied that they should be able to develop own policy... hence ccTLDs
- Differences are about
 - Policy
 - Service communities
- PTR records and in-addr.arpa are late arrival

Policy Differences Example

- First two ccTLDs were .US and .UK
- Differentiation at second level
 - US by geography
 - UK by categories
- Two more early assumptions:
 - Even small countries may grow in users and registrants
 - Service and usability are main motivators of *any* appropriate policy

Key Contexts for Early Decisions

- IANA as registration/maintenance entity
 - Action only after consensus is reached
 - Not a mediator or decision-maker
 - Not a seeker of problems to solve or meddle in
- Pressures from ISO/ITU Open Systems Interconnection Model
 - Government commitment in many countries
 - Internet often permitted only as academic/ research network “until OSI”
 - Government involvement in DNS as contradiction

Discovery of ISO 3166

- Solution to two problems, following on IANA role
 - IANA does not decide which entities qualify
 - IANA does not referee name selection (within or between countries)
 - Also permitted a firm 2 / 3 / 4 character distinction
- Several non-ccTLD proposals over the years
 - IANA position was “find recognized authority and reference that would accomplish what 3166 does for ccTLDs”
- Avoided membership in 3166/MA to preserve independence of decisions

RFC 1591

- Like most other IANA policy documents, it...
 - Described established and tested practice
 - Not a statement of new/ untried policy
- Key themes of
 - Duty
 - Responsibility
 - Equity
 - Trust
- Greed as the primary motivation for *any* domain administration is an ICANN-era development

Role of the ccTLD

- Responsibility to serve local Internet user community
 - Policy development within local context
 - Needs of different countries differ, but try to design for long term – domain restructuring is painful
- External constraints on policy are only
 - Fairness
 - Trust of global community
- Should not try to prohibit registrations in other zones

What Role Did 1591 Anticipate for Governments?

- Governments not mentioned because of
 - National differences
 - OSI
 - Internet/ research community “don't ask, don't tell”

What Role Did 1591 Anticipate for Governments?

- IANA didn't want to try to directly determine legitimacy of governments or their requests
 - Designation of administrator requires clear consensus in country
 - Once delegation occurred, responsibility rests with designated administrator
 - Legitimate government can compel administrator
- IANA could not determine government structure
 - Note anticipated RIR role as intermediaries if needed

Some Other Popular Questions

- Is it ok to sell names outside?
 - What role does “sell” have?
 - As long as local community is being served
- Is service to local community more important that, e.g., rainforest?
 - Local decision
 - But maybe can sell domain and still preserve service and trust.

Amusing Additional Reading

- This topic was reviewed in late 2000 in the context of evolving ICANN decisions at the time. A discussion of that review appears in RFC 3071, published almost exactly eight years ago (and eight years after 1591).
- Some things have changed. Most have not changed very much.
- <http://www.rfc-editor.org/rfc/rfc3071.txt>