Whois Usage and Display

Ram Mohan
Afilias
Setting Context

• Many Internet applications support characters from local languages or scripts
• Domain names are poised to fully support IDNs
• Local language support affects
  • How users compose domain names
    – How registrars collect and display contact information
    – User experience with Whois services and applications
Objectives

A successful evolution from the early

But

steadily dwindling “common case” scenario…
IDN Standards and Whois

• From RFC 4690, *IDN Next Steps*

5.4. Databases of Registered Names

In addition to their presence in the DNS, IDNs introduces issues in other contexts in which domain names are used. In particular, the design and content of databases that bind registered names to information about the registrant (commonly described as "whois" databases) will require review and updating. For example, the whois protocol itself [RFC3912] has no standard capability for handling non-ASCII text: one cannot search consistently for, or report, either a DNS name or contact information that is not in ASCII characters.

This may provide some additional impetus for a switch to IRIS [RFC3981] [RFC3982] but also raises a number of other questions about what information, and in what languages and scripts, should be included or permitted in such databases.
Questions to consider

• Submission and display of contact information is a local matter for registries and registrars
  – Is this desirable and sufficient?
  – Can current practices used by registries and registrars be exploited to a greater extent when contact information is not available in US-ASCII?

• What can we learn from experience to date?
  – Have users adapted?
  – How are law enforcement, interveners, and other parties who use Whois affected today?
  – Is Whois accuracy affected? How?

• Are there any general principles that registry operators and registrars could adopt to minimize the "Babel effect" on Whois services?
More Questions to Consider

• Can we deliver a better Whois service?
  – What features will Internet users find most beneficial in Whois services as the Internet user experience becomes more diverse with respect to languages and scripts?
  – What is an acceptable and appropriate user experience when encountering Whois records with non US-ASCII characters in them?

• Should the Whois service be replaced by other protocols?

• In a future Whois that returns some or all non US-ASCII characters in its output, will the utility of Whois search be reduced?
  – What steps, if any, need to be taken to alleviate such a reduction in functionality?
Recommendation 1

- Use the June 2009 Sydney meeting to host a workshop to discuss changes to domain name records usage and display
  - Asia Pacific venue offers an opportunity to engage participants from several countries that are most affected and benefit most from local language support
- Workshop agenda
  - Consider existing deployment experience
  - Examine current and proposed methods of supporting characters from local languages
  - Examine business, security, technical and user considerations related to the issue
Recommendation 2

• To ICANN BoD
  – Direct GNSO, CCNSO and SSAC to task a WG
    • Study the feasibility or suitability of introducing display specifications or standards to address this issue and formulate a proposal
    • Work with IETF to develop support for non-US-ASCII characters for Whois type data