Summary of IRD calls on 30 August 2010, and September 20

August 30:
Present for the teleconference: Andrei Kolesnikov, Rafik Dammak, Avri Doria, Bob Hutchinson, Yao Jiankang, Steven Metalitz, Jim Galvin, Edmon Chung

ICANN Staff
Julie Hedlund, Steve Sheng, David Piscitello, Glen de Saint Géry

Apologies: Jeremy Hitchcock

September 20:
Present for the teleconference: Andrei Kolesnikov, Rafik Dammak, Bob Hutchinson, Owen Smigelski, Yao Jiankang, Steven Metalitz, Edmon Chung

ICANN Staff
Julie Hedlund, Steve Sheng, David Piscitello, Glen de Saint Géry

Notes:

The WG discussed variants, and have come to the following consensus:

- There is no uniform definition of variant. Different organizations or different countries define it differently. However in general, variants can be categorized as activated variants and reserved variants. Activated variants are variants of a domain name that are put in the DNS zone file, thus resolvable through normal DNS lookup. Reserved variants are variants reserved for a specific domain name and cannot be registered, but are otherwise not in the DNS zone file.
- WG members noted that it is out side the scope of the IRD WG to define variant or discuss how different languages handle variants. Rather, the WG can take the categories as given (activated vs reserved) and make recommendations.
- The WG has agreed that a Whois query of an activated variant should return the WHOIS result of the domain that it was a variant of, as well as an indication that the label queried is a variant of the original domain.
- The WG has also agreed that query of reserved variants, there are two options: A query of reserved variant for XYZ domain would only return a message saying that this is a reserved variant of XYZ domain. A query of a reserved variant would return the same information as the query for an activated variant does. The WG recommended that it is up to the registrars and registries which option they would like to choose. Furthermore the WG thinks it would be helpful that in the Whois result, it can provide a link to the registrar/registries' variant policy.

The WG also discussed about the Whois protocol's inability to support encodings.

The problem is described in RFC 3912:

> The WHOIS protocol has not been internationalised. The WHOIS protocol has no mechanism for indicating the character set in use. Originally, the predominant text encoding in use was US-ASCII. In practice, some WHOIS servers, particularly those outside the USA, might be using some other character set either for requests, replies, or both. This inability to predict or express text encoding has adversely impacted the interoperability (and, therefore, usefulness) of the WHOIS protocol.

The WG members discussed options:

1. **Policy solution:** Requiring a mandatory character set (preferably UTF-8) in WHOIS. One way to do this is to modify RFC 3912 to include UTF-8 as default encoding. The other way is for ICANN to require this encoding to all Whois servers operated by ICANN accredited registrars and registries, hoping that Whois clients, as well as ccTLDs adopt this encoding.

2. **Technical Solution:** Extending WHOIS by adding mechanism to signal character encodings. This can be done by writing extensions to WHOIS similar to MIME for SMTP.

3. **Technical Solution:** Migrating to other protocols such as IRIS or restful WHOIS.

The WG recognized, fundamentally, there are two policy questions at hand:

1. What is our policy regarding the data? (What data element should be internationalized should there be backward compatibility?)

2. What should be done about tools? (Should something be done to move to new protocol? Should this be done over a number of years? How should that happen?)

Some members think the working group needs to make recommendations on both questions. "If we look at the first decision what is our policy regarding the data and we see some stuff that is mandatory and should be backward compatible and some stuff that isn't. Recognizing that perhaps a small tweak to WHOIS is easier to make for a small basic set than to get everybody in the world to implement and instantiate and deploy IRIS or some new protocol, you know, those are policy type decisions that get based on technical realities."

The WG also continued to discuss the IRD-summary document.

Nameserver names: Currently all of them are in US-ASCII. However, with internationalized domain names, it is possible that some will publish their nameservers in IDN. There are several alternatives: one way is to always display it in US-ASCII 7 using the A-label, as this information is generally only of technical interest and should be displayed in same way as it is in the DNS. Anther way is to have name servers displayed in both A-label and U-label to the extent such information is available as shown in the following figure.

Parties on the phone call felt that for technical and usability purposes, nameservers should be displayed in A-label by default, and to the extent possible, be displayed in U-label as well.

Email address (RAA 3.3.1.7,8): With email internationalization efforts ongoing, some IRD-WG members thought that the email address field also should internationalized data. Specifically, they recommended using RFC 5335 as a basis.

Jiankang Yao updated that RFC 5335 is in its final call stage at IETF, and expected to be standardized later this year, and recommended the IRD use RFC 5335 to represent internationalized emails.

Registration Status: Registrars and registries often provide the status of the registration. For example client-hold, delete prohibited, update prohibited, etc. There are a couple of options such as: 1) leave it in ASCII 7; 2) always publish the exact EPP status code and leave it to the clients to decide whether to localize or not; 3) identify a more easily understood representation (for the mandatory character set); 4) publish the easily understood representation in mandatory and local character sets or could be any combination of these approaches.

Staff noted that the Whois specification in new gTLD guidebook is choosing option 2. Parties on the call agreed that the WG should follow what ICANN has required in new gTLD guidebook.