Internationalized Registration Data Working Group (IRD-WG) Interim Report

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Agenda

- Introduction

- IRD-WG Objectives

- Summary of IRD-WG Discussion

- Preliminary Recommendations for Community Consideration

- Questions for Community Discussion

Introduction

- Internationalized domain name (IDN) guidelines exist for domain labels and names.

- No standards exist for submission and display of domain registration data in directory services.

IRD-WG Objectives

- How to internationalize domain registration data?
- How to specify how to internationalize the WHOIS protocol?

Summary of IRD-WG Discussion

- Is the WHOIS Protocol Able To Support Internationalized Registration Data?

- Query and Display of Variants in Internationalized Registration Data

- What Capabilities Are Needed for Directory Services in the IDN Environment?

- How to Accommodate Users Who Want To Submit and Have Registration Data Displayed in Local Scripts?

- Models for Internationalizing Registration Contact Data

- Preliminary Recommendations for Community Consideration

How to Accommodate Users Who Want To Submit and Have Registration Data Displayed in Local Scripts

Various elements of registration data could be separately internationalized as follows:

Fields	Possible Ways to Internationalize
Domain Names	Both A-label and U-label
Name Server Names	A-label, and optionally U-label
Sponsoring Registrar	US-ASCII
Telephone/fax	UPC E.123
Email	RFC 5335
Registration Status	Publish exact EPP code
Dates	Not discussed yet by the IRD-WG

Four Models for Internationalizing Registration Contact Data

The IRD-WG members discussed four possible models but did not endorse any particular model. They are seeking comment from the community on which model, if any, is appropriate.

Model 1: Registrants provide domain contact data in "Must Be Present" script.

Model 2: Registrants provide data in any registrar-accepted script and registrars provide point of contact for transliteration or translation.

Model 3: Registrants provide data in script accepted by the registrar and registrars provide transliteration tools to publish in "Must be Present" script.

Model 4: Registrants provide data in language accepted by the registrar and registrars provide translation tools to publish in "Must be Present" language.

Model 1

Models	Russian Example	Chinese Example
Model 1: Registrants provide domain contact data in "Must Be Present" script	*(Showing Translation)* contact: Petr Ivanov (Петр Иванов) organisation: OAO «Cicle» address: Office 1, Lenin st., Kovrov address: Vladimir region, 601900 address: Russia	*(Showing Translation)* contact: Zhang, San (张三) Organisation: address: Apt 13-203, Ludan Village address: Shenzhen, Guandong Province address: P.R.China
	(Showing Transliteration) contact: Petr Ivanov organisation: OAO «Tsirkul» address: Office 1, Ulitsa Lenina, Kovrov address: Vladimirskaya oblast, 601900 address: Rossiya	*(Showing Transliteration)* contact: Zhang, San Organisation: address: Ludan cun 13 dong 203 address: Shenzhen, Guandong sheng address: zhong guo

Model 2

Models	Russian Example	Chinese Example
Model 2: Registrants provide data in any registrar-accepted script and registrars provide point of contact	Registrar POC: http://nic.ru phone: +7 800 234-5689 fax-no: +7 800 234-5699 email: info@nic.ru contact: Петр Иванв organisation: ОАО Циркуль address: ул.Ленина, офис 1, г.Ковров address: Владимирская обл. 601900 address: Россия	Registrar POC: http://registrarA.com phone: +1 86 755 5555-5689 fax-no: +1 86 755 5555-5390 email: info@registraA.com contact: 张三 Organisation: address: 鹿丹村13 栋 203 address: 深圳, 广东省 address: 中国

Model 3

Models	Russian Example	Chinese Example
Model 3: Registrants provide data in script accepted by the registrant and registrars provide transliteration tools to publish in "Must be Present" script.	contact: Petr Ivanov organisation: OAO «Tsirkul» address: Office 1, Ulitsa Lenina, Kovrov address: Vladimirskaya oblast, 601900 address: Rossiya	contact: Zhang, San Organisation: address: Ludan cun 13 dong 203 address: Shenzhen, Guandong sheng address: zhong guo

Model 4

Models	Russian Example	Chinese Example
Model 4: Registrants provide data in language accepted by the registrars and registrars provide translation tools to publish in "Must be Present" language.	contact: Petr Ivanov organisation: OAO «Cicle» address: Office 1, Lenin st., Kovrov address: Vladimir region, 601900 address: Russia	contact: Zhang, San Organisation: address: Apt 13-203, Ludan Village address: Shenzhen, Guandong Province address: P.R.China

Query and Display of Variants in Internationalized Registration Data

- It is outside the scope of IRD-WG to define variants.
- The IRD-WG will use the categories as they are generally defined (activated vs. reserved):
    - Activated: Variants that are in the DNS; and
    - Reserved: For a given domain, these are variants that are not in DNS, but are reserved.
- Query of activated variants should return all information of the domain.
- Query of reserved variants is a matter of local policy.

What Capabilities Are Needed for Directory Services in the IDN Environment?

- WHOIS protocol clients must be able to accept a user query of domain name in either U-label or A-label format;

- WHOIS protocol clients must be able display results of queries in both U-label and A-label for the domain names; and

- Bundled representations of a single U-label or A-label query should be returned.

What Capabilities Are Needed for Directory Services in the IDN Environment?

Preliminary Recommendations for Community Consideration

Preliminary Recommendation (1): For a directory service in the IDN environment:

1. WHOIS protocol clients (both port 43 and web) must be able to accept a user query of domain name in either U-label or A-label format;

2. WHOIS protocol clients must be able display result of queries in both U- and A-label for the domain names; and

3. Domain registration data should include variants of an IDN label in the response as well.

Preliminary Recommendations for Community Discussion

Preliminary Recommendation (2): How could each data element be separately internationalized?

1. Directory services should return both A-label and U-label representation for the given IDN domains queried;
2. Directory services should return both A-label and U-label representations for name server names (to the extent that such information is available);
3. Directory services should always make sponsoring registrar information available in US-ASCII7; and
4. Directory services should always return the exact EPP status code for Registration Status.

Questions for Community Consideration

The IRD-WG calls attention to and seeks comment on the following questions regarding internationalized registration data:

1. Which of the four models for internationalizing registration contact data is most appropriate, if any? Are there other models the IRD-WG should consider?

2. Which of the preliminary recommendations, if any, are feasible? Are there related recommendations the IRD-WG should consider?

Thank You and Questions

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Terminology

WHOIS Could Mean:	Terms Used In This Presentation
The WHOIS protocol - RFC 3912	WHOIS protocol
The Whois "service" - which provides information via both the WHOIS protocol and web-based interfaces.	Directory Service
The data collected at registration and made available via the Whois service.	Domain Registration Data

ASCII Representation of Certain Registration Data:	Terms Used In This Presentation
The ASCII* representation of certain registration data currently must be available for all WHOIS responses	"Must Be Present" Script

ASCII: American Standard Code for Information Interchange is a character-encoding scheme based on the ordering of the English alphabet

Is the WHOIS Protocol Able to Support IRD?

According to RFC 3912:

"The WHOIS protocol has no mechanism for indicating the character set in use …. This inability to predict or express text encoding has adversely impacted the interoperability (and, therefore, usefulness) of the WHOIS protocol."

RFC 3912 is silent about encoding other than requiring a specific end of line marker.