

Transliteration and Translation - RDAP and EPP

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Introduction

Generic TLDs (gTLDs) Domain Name Registries and Registrars operating according to an agreement with the Internet Corporation for Assigned Names and Numbers (ICANN), are required to follow ICANN Consensus Policies.

On 2015/09/28, the ICANN Board adopted the GNSO Council Policy Recommendations concerning the translation and transliteration of contact information as presented in the "Final Report on the Translation and Transliteration of Contact Information Policy Development Process".

Recommendations

- Data fields should be stored and displayed in a way that allows for easy identification of ... what language(s)/script(s) have been used by the registered name holder.
- If the transformation of contact information is performed, ..., these data should be presented as additional fields (in addition to the authoritative local script fields provided by the registrant) and that these fields be marked as transformed and their source(s) indicated.

Introduction

Two Internet-Drafts have been published to support the recommendations in EPP and RDAP:

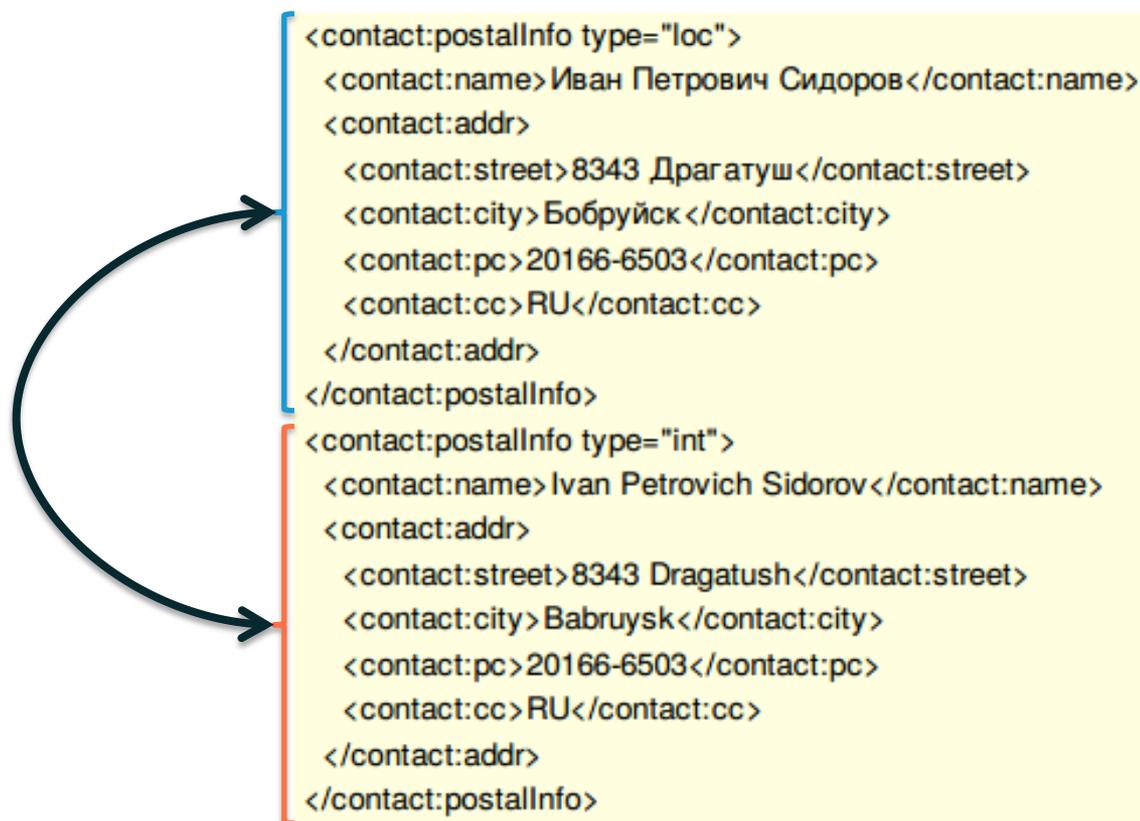
1. **draft-lozano-regext-epp-transf-contact-inf**
2. **draft-lozano-regext-rdap-transf-contact-inf**

Recommendations

- Data fields that require support for language tagging, and could be transliterated/translated:
 - **<contact:name>**
 - **<contact:org>**
 - **<contact:addr>**
 - **<domain:name>**

draft-lozano-regext-epp-transf-contact-inf

- The use of this extension imply that the localized and internationalized forms of the postal-address information in the contact object represent the same information.



- For “loc” and “int” forms, the following extra information **MUST** be provided when using this extension.
 - infSource (**attribute**), source of the information, "registry", "registrar", "reseller", or "registrant".
 - type (**attribute**), reference to the form in the contact object, “loc” or “int”.
 - authOrTransMechanism (**attribute**), used to define if the information is authoritative (provided by the registrant), or transformed (“translation” or “transliteration” from the authoritative).

- Language tags (**elements**) for: name, org (OPTIONAL) and addr.
- Country name (**element**) with support for language tags.
- OPTIONAL transliterationStd (**element**), contains the transliteration standard, for example, ISO 9.

Extension

```

<ird:contactPostallInfo infSource="registrant"
  type="loc" authOrTransMechanism="authoritative">
  <ird:nameLang>ru</ird:nameLang>
  <ird:addrLang>ru</ird:addrLang>
  <ird:country lang="ru">Россия</ird:country>
</ird:contactPostallInfo>
<ird:contactPostallInfo infSource="registrar"
  type="int" authOrTransMechanism="translation">
  <ird:nameLang>en</ird:nameLang>
  <ird:addrLang>en</ird:addrLang>
  <ird:country lang="en">Russia</ird:country>
</ird:contactPostallInfo>

```

Contact Object

```

<contact:postallInfo type="loc">
  <contact:name>Иван Петрович Сидоров</contact:name>
  <contact:addr>
    <contact:street>8343 Драгатуш</contact:street>
    <contact:city>Бобруйск</contact:city>
    <contact:pc>20166-6503</contact:pc>
    <contact:cc>RU</contact:cc>
  </contact:addr>
</contact:postallInfo>
<contact:postallInfo type="int">
  <contact:name>Ivan Petrovich Sidorov</contact:name>
  <contact:addr>
    <contact:street>8343 Dragatush</contact:street>
    <contact:city>Babruysk</contact:city>
    <contact:pc>20166-6503</contact:pc>
    <contact:cc>RU</contact:cc>
  </contact:addr>
</contact:postallInfo>

```

- Additional transformations may be provided using this extension.
 - infSource (**attribute**), source of the information, "registry", "registrar", "reseller", or "registrant".
 - conversionMechanism (**attribute**), used to define if “translation” or “transliteration” was used.
- Note: “int” (7-bit US-ASCII character set) may not be sufficient to represent a transformation, for example, a translation from Chinese (authoritative, “loc”) to Russian.

- id (**element**), used to identify a particular transformation.
- name, org (OPTIONAL), addr, and country name (**elements**) with support for language tags.
- OPTIONAL transliterationStd (**element**), contains the transliteration standard used for the transformation, for example, ISO 9.
- OPTIONAL disclose (**element**), disclose handling information of the transformation object.

Additional postal info

```
<ird:additionalPostalInfo infSource="registrar"
  transMechanism="transliteration">
  <ird:id>sh8013-3</ird:id>
  <ird:name lang="ru-Latn">Ivan Petrovič Sidorov</ird:name>
  <ird:addr lang="ru-Latn">
    <ird:street>8343 Dragatuš</ird:street>
    <ird:city>Bobrujsk</ird:city>
    <ird:pc>20166-6503</ird:pc>
    <ird:cc>RU</ird:cc>
  </ird:addr>
  <ird:country lang="ru-Latn">Rossiâ</ird:country>
  <ird:transliterationStd>iso9</ird:transliterationStd>
  <ird:disclose flag="0">
    <ird:name/>
  </ird:disclose>
</ird:additionalPostalInfo>
```

draft-lozano-regext-rdap-transf-contact-inf

- Additional transformations may be outputted in a new array of “transformation” objects called “transformations”.
- The “transformations” array is added within an “entity” object.
- The “transformation” object contains:
 - vcardArray, a jCard with the entity's transformed contact information. The language property **MUST** be included in the jCard object.

- `sourceOfTransformation`, a string containing the source of the transformation, “registry”, “registrar”, “reseller” or “registrant”.
- `typeOfTransformation`, a string containing the type of the transformation, “translation” or “transliteration”.
- An OPTIONAL `transliterationStandard`, a string containing the standard (e.g. ISO 9, ISO 7098, etc.) used for the transliteration. This element **MUST** be present if `typeOfTransformation` is transliteration.

RDAP

```
"entities":[
  {
    "objectClassName":"entity",
    "handle":"XXXX",
    "vcardArray":[
      "vcard",
      [
        ["version", {}, "text", "4.0"],
        ["fn",{"language":"zh"},"text","王五"],
        ["adr",
          {"language":"zh"},
          "text",
          [
            "",
            "1827号",
            "1047 牛山珍护膝村",
            "连云港市",
            "江苏省",
            "中国"
          ]
        ],
        ["tel", {},
          "uri", "tel:+86146-7515-1740"
        ],
        ["email", {},
          "text", "王五@例.例"
        ]
      ]
    ]
  },
  "transformations":[
```

```
{
  "objectClassName":"transformation",
  "vcardArray":[
    "vcard",
    [
      ["version", {}, "text", "4.0"],
      ["fn",{"language":"sp"},"text","Wang Wu"],
      ["adr",
        {"language":"sp"},
        "text",
        [
          "",
          "No. 1827",
          "1047 Niu Shan Zhen Hu Xi Cun",
          "Ciudad Lianyungang",
          "Provincia Jiangsu",
          "China"
        ]
      ],
      ["tel", {},
        "uri", "tel:+86146-7515-1740"
      ],
      ["email", {},
        "text", "王五@例.例"
      ]
    ]
  ],
  "sourceOfTransformation":"registry",
  "typeOfTransformation":"translation"
}
```

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Thank You and Questions

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