Foundation for Assistance for Internet Technologies and Infrastructure Development

Description of EPP Extensions in

Flexireg System

Version 1.1

Moscow, 2015

Contents

1. Introduction

This Description of EPP Extensions in Flexireg System ("Description") features all the extensions of the EPP protocol implemented in flexireg domain registration system.

This document does not feature the EPP protocol in full, since the protocol itself is the industry standard and is implemented in accordance with STD 69.

Extensions from this Description are used during the General Availability phase. Extensions for Sunrise, Landrush, and Claims phases are given in a separate document.

Terms, definitions, and developments standards used in this Description are given in "Specifications for Registrars' Interaction with Flexireg System."

2. Extensions for Domain object

2.1. DNSSec extension

urn:ietf:params:xml:ns:secDNS-1.1

This extension is used during delegation of domains for protection from attacks related to use of forged DNS data during domain name resolution.

Examples of using this extension are given in "Examples of Requests and Responses."

2.2. IDN extension

urn:ietf:params:xml:ns:idn-1.0

This extension is used for registration of Internationalized Domain Names (domain names displayed in a language-specific script or alphabet).

Examples of using this extension are given in "Examples of Requests and Responses."

3. Extensions for Contact object

tcicontact-ext-1.0

Commands for creating and editing the Contact object are extended with a new mandatory element – type of contact. Depending on the type of contact, objects will have different sets of attributes. It is necessary to specify one of the two types of contact:

- "person." This type of contact means that the contact is for an individual.
- "organization." This type of contact means that the contact is for an organization (legal entity). Set of attributes of a Contact object is the subject for the specified type.

Set of attributes of a Contact object depends on the specified type.

Examples of using extensions are given in "Examples of Requests and Responses."

3.1. Attributes for extension of legal entity's contact

Contact object with Organization type is intended for description of a legal entity's contact. The object contains the following attributes:

- contact type – for legal entities it must be <contact:organization>;
  - legalAddr – complex attribute for organization's legal address. The contact may contain several addresses, including addresses in different languages (with different values of Type attribute). It includes the following elements and attributes:
    - type – contact's language. There are two ways of using this attribute:
    - local – the address will be specified in Russian, using the Cyrillic characters and digits;
    - int – the address will be specified using the Latin characters and digits.
    - street – name of the street. The attribute is a text string. It may be filled with Latin or Cyrillic letters, depending on the value of Type attribute. Spaces and punctuation marks are also allowed. This is a mandatory attribute;
    - city – name of the city. The attribute is a text string. It may be filled with Latin or Cyrillic letters, depending on the value of Type attribute. Spaces and punctuation marks are also allowed. This is a mandatory attribute;
    - sp – region's code. The attribute shall be filled with a two-letter code;
    - pc – postal code;
    - cc – two-letter country code. This is a mandatory attribute;
  - TIN – organization's taxpayer identification number. This is a mandatory attribute. The length of this attribute is 22 characters.

3.2. Attributes for extension of individual's contact

Contact object with Person type is intended for description of an individual's contact. The object contains the following attributes:

- contact type – for individuals it must be <contact:person>;
  - birthday – date of birth. The attribute must be filled with digits using this format: YYYY-MM-DD.
  - passport – string with details from the ID. The attribute must contain the name of document in English and the number of document.
  - TIN – individual's taxpayer identification number. This is not a mandatory attribute. It may be left blank.

3.3. Schema for extension of Create and Update commands for Contact object

```
<?xml version="1.0" encoding="UTF-8"?>
<schema targetNamespace="http://www.tcinet.ru/epp/tci-contact-ext-1.0"
  xmlns:contExt="http://www.tcinet.ru/epp/tci-contact-ext-1.0"
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
xmlns="http://www.w3.org/2001/XMLSchema"
  elementFormDefault="qualified">
```

```xml
  <import namespace="urn:ietf:params:xml:ns:contact-1.0"
schemaLocation="contact-1.0.xsd" />

  <annotation>
    <documentation>
      Extensible Provisioning Protocol v1.0
      contact extentions provisioning schema.
    </documentation>
  </annotation>

  <!-- Child elements found in EPP commands. -->
  <element name="create" type="contExt:createType" />
  <element name="update" type="contExt:updateType" />

  <!-- Child elements of the <create> command. -->
  <complexType name="createType">
    <sequence>
      <choice>
        <element name="person" type="contExt:personType" />
        <element name="organization" type="contExt:orgType" />
      </choice>
    </sequence>
  </complexType>

  <!-- Child elements of organization interface -->
  <complexType name="legalAddrType">
    <sequence>
      <element name="street" type="contact:optPostalLineType"
        minOccurs="1" maxOccurs="3" />
      <element name="city" type="contact:postalLineType" />
      <element name="sp" type="contact:optPostalLineType"
        minOccurs="0" />
      <element name="pc" type="contact:pcType" minOccurs="0" />
      <element name="cc" type="contact:ccType" />
    </sequence>
    <attribute name="type" type="contact:postalInfoEnumType"
      use="required" />
  </complexType>

  <simpleType name="TINType">
    <restriction base="token">
      <maxLength value="22" />
    </restriction>
  </simpleType>

  <complexType name="orgType">
    <sequence>
      <element name="legalAddr" type="contExt:legalAddrType"
        minOccurs="1" maxOccurs="2" />
      <element name="TIN" type="contExt:TINType" />
      <element name="disclose" type="contExt:orgDiscloseType"
        minOccurs="0" />
    </sequence>
  </complexType>

  <complexType name="orgDiscloseType">
    <sequence>
      <element name="legalAddr" type="contact:intLocType"
        minOccurs="0" maxOccurs="2" />
```

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```xml
      <element name="TIN" minOccurs="0" />
    </sequence>
    <attribute name="flag" type="boolean" use="required" />
</complexType>


<!-- Child elements of person interface -->
<complexType name="personType">
  <sequence>
    <element name="birthday" type="date" />
    <element name="passport" type="contExt:passportType" />
    <element name="TIN" type="contExt:TINType" minOccurs="0" />
    <element name="disclose" type="contExt:personDiscloseType"
      minOccurs="0" />
  </sequence>
</complexType>


<simpleType name="passportType">
  <restriction base="token">
    <minLength value="1" />
    <maxLength value="512" />
  </restriction>
</simpleType>


<complexType name="personDiscloseType">
  <sequence>
    <element name="birthday" minOccurs="0" />
    <element name="passport" minOccurs="0" />
    <element name="TIN" minOccurs="0" />
  </sequence>
  <attribute name="flag" type="boolean" use="required" />
</complexType>


<!-- Child elements of the <update> command. -->
<complexType name="updateType">
  <sequence>
    <element name="chg" type="contExt:chgType" minOccurs="0" />
  </sequence>
</complexType>


<!-- Data elements that can be changed. -->
<complexType name="chgOrgType">
  <sequence>
    <element name="legalAddr" type="contExt:legalAddrType"
      minOccurs="0" maxOccurs="2" />
    <element name="TIN" type="contExt:TINType" minOccurs="0" />
    <element name="disclose" type="contExt:orgDiscloseType"
      minOccurs="0" />
  </sequence>
</complexType>


<complexType name="chgPersonType">
  <sequence>
    <element name="birthday" type="date" minOccurs="0" />
    <element name="passport" type="contExt:passportType"
      minOccurs="0" />
    <element name="TIN" type="contExt:TINType" minOccurs="0" />
    <element name="disclose" type="contExt:personDiscloseType"
      minOccurs="0" />
  </sequence>
```

```
      </complexType>

      <!-- Data elements that can be changed. -->
      <complexType name="chgType">
        <sequence>
          <choice>
            <element name="organization" type="contExt:chgOrgType" />
            <element name="person" type="contExt:chgPersonType" />
          </choice>
        </sequence>
      </complexType>

      <!-- Child response elements. -->
      <element name="infData" type="contExt:createType" />
</schema>
```