RDAP jCard Profile
draft-rdap-jcard-profile-00

Abstract

   The Registration Data Access Protocol (RDAP) is used by Regional
   Internet Registries (RIRs) and Domain Name Registries (DNRs) to
   provide access to their resource registration information. RDAP uses
   jCard to convey information about individuals and other entities: for
   example, for the technical contact for a domain name. In practice,
   server operators are only using a small subset of jCard's
   functionality, so in an effort to simplify the requirements on the
   client side, this document defines a jCard profile for use with RDAP.

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   This Internet-Draft is submitted in full conformance with the
   provisions of BCP 78 and BCP 79.

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1. Introduction

    The Registration Data Access Protocol (RDAP) [RFC7480] is used by
    Regional Internet Registries (RIRs) and Domain Name Registries (DNRs)
    to provide access to their resource registration information. RDAP
    uses jCard ([RFC7095]) to convey information about individuals and
    other entities (e.g. organisations and groups). jCard is in turn a
    way of representing vCard ([RFC6350]) information in JSON.

    The core vCard specification defines 36 properties, 11 parameters, 12
    data types, and 31 parameter values. More of each are defined in
    subsequent specifications (see the IANA vCard Elements registry).
    Due to the lack of supporting libraries for jCard, RDAP client
    developers often have to implement jCard support themselves, and
    handling the entire specification is a substantial burden.

    This document defines a jCard profile for use with RDAP that will
    reduce the implementation complexity for client developers. The
    profile is primarily based on response data from the implementations
    that are currently included in the IANA RDAP bootstrap files.

1.1. Requirements Language

    The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT",
    "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this
    document are to be interpreted as described in RFC 2119 [RFC2119].

[2](). Profile Definition

The following properties may be used in jCards included in RDAP
responses:

    kind;

    fn;

    n;

    adr;

    tel;

    email;

    lang;

    geo;

    title;

    role;

    org;

    version; and

    contact-uri.

Each jCard MUST contain a "kind" property. The value of that
property MUST be "individual", "group", or "org".

A "geo" property MUST have a type of "uri". A "tel" property MUST
have a type of "uri" or "text". A "lang" property MUST have a type
of "language-tag". A "contact-uri" property MUST have a type of
"uri". All other properties MUST have a type of "text".

An "adr" property MUST include a "label" parameter, containing the
content of the delivery address as a single string.

Properties may include "language", "altid", and "pref" parameters.

"email", "org" and "adr" properties may include a "type" parameter.
The "type" parameter values that may be used are "work" and "home".

A "tel" property may include a "type" parameter. The "type"
parameter values that may be used are those defined in [RFC6350].

An "adr" property may include a "cc" parameter. This parameter may
be set even when the "country name" component of the property's value
is not set.

Properties, types, and parameters not expressly permitted by way of
this profile MUST NOT be used.

3. Operational Considerations

An RDAP client that encounters a jCard that is not in conformance
with this specification SHOULD treat the jCard as if any non-
conforming properties, parameters, or types were not present.

Various server implementations are currently using the non-standard
"ISO-3166-1-alpha-2" property for the ISO-3166-1 alpha 2 country code
of the country from the "adr" property in the jCard. This behaviour
appears to be based on guidance from section 1.4.1 of ICANN's current
RDAP response profile ([ICANN-RDAP-PROFILE]). However, that section
states that it only applies when the "ISO-3166-1-alpha-2" property
"has been published in the vCardProperties registry defined in
Section 10.3.1 of RFC 6350", and that property has not yet been
published in that way.

Various server implementations are currently setting the "country
name" component of the "adr" property to be the ISO-3166-1 alpha 2
country code of the country. This behaviour appears to be based on
guidance from section 1.4.2 of ICANN's current RDAP response profile
([ICANN-RDAP-PROFILE]). The "cc" parameter approach to this problem,
defined in [RFC8605], is preferred in this profile.

4. Security Considerations

TBD

5. IANA Considerations

TBD

6. References

6.1. Normative References

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   [RFC7095] Kewisch, P., "jCard: The JSON Format for vCard", RFC 7095,
              DOI 10.17487/RFC7095, January 2014,
              <https://www.rfc-editor.org/info/rfc7095>.

6.2. Informative References

   [ICANN-RDAP-PROFILE]
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              Registration Data Access Protocol (RDAP)", RFC 7480,
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   [RFC8605] Hollenbeck, S. and R. Carney, "vCard Format Extensions:
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