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vCard Format Extension for JSContact

Abstract

This document defines a set of new properties for vCard and extends the use of existing ones. Their primary purpose is to align the same set of features between the JSContact and vCard formats, but the new definitions also aim to be useful within just the vCard format.

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1. Introduction

The JSContact [[I-D.ietf-calext-jscontact](#)] format aims to be an alternative to the vCard [[RFC6350](#)] format for representation of contact and address book data. As such, it introduces new semantics that are not covered in the current definition of vCard and its various extensions. Converting contact data between the two formats is defined in [[I-D.ietf-calext-jscontact-vcard](#)] with the goal of not losing any semantics during conversion. In order to do so, this document defines a new set of properties for vCard and extends existing definitions.

1.1. Notational Conventions

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in BCP 14 [[RFC2119](#)] [[RFC8174](#)] when, and only when, they appear in all capitals, as shown here.

1.2. ABNF Notations

The ABNF definitions in this document use the notations of [[RFC5234](#)]. ABNF rules not defined in this document either are defined in [[RFC5234](#)] (such as the ABNF for CRLF, WSP, DQUOTE, VCHAR, ALPHA, and DIGIT) or [[RFC6350](#)].

2. New Properties

2.1. CONTACT-CHANNEL-PREF Property

Property name: CONTACT-CHANNEL-PREF

Purpose: This property defines which channels the entity associated with this vCard prefers to be contacted with.

Value type: A single text value, restricted to an enumerated list of allowed values.

Cardinality: *

Property parameters: The PREF parameter defines the preference of this contact channel in relation to other contact channels. The TYPE parameter defines when to use this preference.

Description: This defines an order of preferences for contact channels. The contact channels supported in this specification are phone numbers, email, instant messaging and postal delivery. They are identified by the name of the respective vCard property.

Format definition: This property is defined by the following notation:

```
contact-channel-pref = "CONTACT-CHANNEL-PREF"
                        *(";" contact-channel-pref-param )
                        ":" contact-channel-pref-value CRLF

contact-channel-pref-param = type-param / pref-param / any-param

contact-channel-pref-value = "ADR" / "EMAIL" / "IMPP" / "TEL" /
                             x-value
```

Example(s):
CONTACT-CHANNEL-PREF;PREF=1:EMAIL
CONTACT-CHANNEL-PREF;PREF=2:TEL

2.2. CREATED Property

Property name: CREATED

Purpose: This property defines the date and time when the vCard was created

Value type: A single timestamp value.

Cardinality: *1

Property parameters: VALUE

Description: This is the time stamp when the vCard was created. Copying the vCard across systems does not count as a new

creation, nor does a new revision. Instead, the time stamp value typically stays unchanged for the existence of the vCard.

Format definition: This property is defined by the following notation:

```
created          = "CREATED" createdparam
                  ":" timestamp CRLF

createdparam     = *(
                    ;
                    ; The following is OPTIONAL,
                    ; but MUST NOT occur more than once.
                    ;
                    (";" "VALUE" "=" "TIMESTAMP") /
                    ;
                    ; The following is OPTIONAL,
                    ; and MAY occur more than once.
                    ;
                    (";" any-param)
                    ;
                  )
```

Example (5): 20220705093412Z
CREATED;VALUE=TIMESTAMP:20211022T140000-05

2.3. GRAMMATICAL-GENDER Property

Property name: GRAMMATICAL-GENDER

Purpose: This property defines the grammatical gender that shall be used to address the entity represented by this vCard.

Value type: A single text value, restricted to an enumerated list of allowed values.

Cardinality: *

Property parameters: LANG

Description: This property defines the grammatical gender that the contact prefers to be addressed by or referred at. Multiple occurrences of this property are allowed, but **SHOULD** be distinguished by the LANG parameter.

Many human languages use grammatical genders in salutations and other language constructs. For example, the German language typically distinguishes between the grammatical gender of the recipient in salutations. The allowed values for this property aim to cover grammatical genders for the majority of human languages. This specification registers an [initial list \(Table 3\)](#) of allowed values at the IANA vCard Property Values Registry, but this may be extended later.

Format definition:

This property is defined by the following notation:

```
gram-gender = "GRAMMATICAL-GENDER" gram-gender-param
              ":" gram-gender-value CRLF
```

```
gram-gender-param =
    *(
      ;
      ; The following is OPTIONAL,
      ; but MUST NOT occur more than once.
      ;
      (";" language-param) /
      ;
      ; The following is OPTIONAL,
      ; and MAY occur more than once.
      ;
      (";" any-param)
      ;
    )
```

```
gram-gender-value = "animate" /
                    "female" /
                    "inanimate" /
                    "male" /
                    "neuter" /
                    iana-token
                    x-value
```

Example: GRAMMATICAL-GENDER:neuter

2.4. LOCALE Property

Property name: LOCALE

Purpose: This property defines the default locale that human-readable text values in this vCard should be assumed written in.

Value type: A single Language-Tag value as defined in [Section 4](#) of [\[RFC6350\]](#).

Cardinality: *1

Property parameters: The LANG parameter **MUST NOT** be assigned to this property.

Description: This property defines the locale in which property values of type TEXT shall be assumed to be written for this vCard. If a vCard property includes the LANG parameter, then the

parameter value has higher precedence than the LOCALE property value.

Format definition: This property is defined by the following notation:

```
locale          = "LOCALE" any-param ":" Language-Tag CRLF
                  ; Language-Tag is defined in RFC6350, Section 4.
```

Example: locale=de-AT

2.5. PRONOUNS Property

Property name: PRONOUNS

Purpose: This property defines the pronouns that shall be used to refer to the entity represented by this vCard.

Value type: A single text value.

Cardinality: *

Property parameters: LANG, PEF, TYPE

Description: This property contains the pronouns that the contact chooses to use for themselves. The value is free-form text. These pronouns shall be used when addressing or referring to the contact. Multiple occurrences of this property **MAY** define pronouns for multiple languages, preferences and contexts.

Format definition: This property is defined by the following notation:

```
pronouns        = "PRONOUNS" pronouns-param ":" text CRLF

pronouns-param =
    *(
        ;
        ; The following is OPTIONAL,
        ; but MUST NOT occur more than once.
        ;
        (";" language-param / pref-param / type-param) /
        ;
        ; The following is OPTIONAL,
        ; and MAY occur more than once.
        ;
        (";" any-param)
        ;
    )
```

Example: PRONOUNS;LANG=en:they/them

2.6. SOCIALPROFILE Property

Property name:

SOCIALPROFILE

Purpose: To specify the URI or username for social media profiles associated with the object the vCard represents.

Value type: A single URI or TEXT value. The default value type is URI.

Cardinality: *

Property parameters: The SERVICE-TYPE parameter **SHOULD** be assigned to this property if the value type is URI. It **MUST** be assigned if the value type is TEXT. In either case, it **MUST NOT** be assigned more than once.

Description: Several vCard address book implementations currently use an experimental X-SOCIALPROFILE property to store social media profiles for contacts. This specification provides an IANA-registered property for the same purpose. In addition to the typical use of this property with URI values, it also allows to set usernames for social media services as free-text TEXT values, in which case the service name **MUST** be provided as a parameter.

Format definition: This property is defined by the following notation:

```
socialpr      = "SOCIALPROFILE" socialpr-param ":"  
                socialpr-value CRLF
```

```
socialpr-param = "VALUE=uri" / "VALUE=text" /  
                service-type-param / any-param
```

```
socialpr-value = URI / text
```

Example:
SOCIALPROFILE;SERVICE-TYPE=Twitter:https://twitter.com/ietf
SOCIALPROFILE:https://github.com/github
SOCIALPROFILE;SERVICE-TYPE=SomeSite;VALUE=TEXT:peter94

3. New Parameters

3.1. AUTHOR Parameter

Parameter name: AUTHOR

Purpose: This parameter identifies the author of the associated property value.

Description: This parameter **MAY** be set on any property where conveying authorship is desired. It identifies the author as a URI [[RFC3986](#)]. Since every valid URI includes the COLON (U+003A) character, the parameter value **MUST** be quoted. Note that as an alternative or in addition to this parameter, the AUTHOR-NAME

parameter allows to name an author as free-text value (see [Section 3.2](#)).

Format definition: = "AUTHOR" "=" DQUOTE 1*QSAFE-CHAR DQUOTE
; a valid URI from Section 3 of [RFC3986]

EXAMPLE(A) AUTHOR="mailto:john@example.com":This is some note.

3.2. AUTHOR-NAME Parameter

Parameter name: AUTHOR-NAME

Purpose: This parameter names the author of the associated property value.

Description: This parameter **MAY** be set on any property where conveying authorship is desired. It names the author as a free-text value. The parameter value **MUST NOT** be empty. Implementations **MUST** take care to quote the name part, if otherwise the part would not be a valid param-value (see [Section 3.3](#) of [RFC6350]). Note that as an alternative or in addition to this parameter, the AUTHOR parameter allows to identify an author by URI (see [Section 3.1](#)).

Format definition: param = "AUTHOR-NAME" "=" param-value ; not empty

EXAMPLE(A) AUTHOR-NAME=John Doe:This is some note.
NOTE;AUTHOR-NAME="_:l33tHckr:_":A note by an unusual author name.

3.3. CREATED Parameter

Parameter name: CREATED

Purpose: This parameter defines the date and time when a property was created in a vCard.

Description: This parameter **MAY** be set on any property to define the point in time when the property was created. The value **MUST** be a valid **TIMESTAMP** value as defined in [Section 4.3.5](#) of [RFC6350]. Generally, updating a property value **SHOULD NOT** change the creation timestamp. It is up to implementations to decide if a property change resembles an update or rather a delete and create.

Format definition: param = "CREATED" "=" param-value ;
; a valid **TIMESTAMP** of Section 4.3.5 of [RFC6350]

EXAMPLE(S) CREATED=20221122T151823Z:This is some note.

3.4. DERIVED Parameter

Parameter name: DERIVED

Purpose: This parameter specifies that the value of the associated property is derived from some other property value or values.

Description: This property parameter **MAY** be specified on any property when the value is derived from some other property or properties. When present with a value of true, clients **MUST NOT** update the property.

For an example, an implementation may derive the value of the FN property from the name components of the N property. It indicates this by setting the DERIVED parameter on the FN property to true.

Format definition: = "DERIVED" "=" ("true" / "false")
; Default is false

Example(s):Quinlan;Mr.;
FN;DERIVED=TRUE:Mr. John Quinlan

3.5. RANKS Parameter

Parameter name: RANKS

Purpose: This parameter specifies a ranking among the name components of a vCard N property value.

Description: The RANKS parameter on a N property assigns a rank among the same-typed name components of a N property value. Some cultures assign ranks to name components, such as a *first* and a *second* surname, or people might prefer to go by their second given name. But the N property value does not allow to infer a culturally or otherwise significant rank from the order in which same-typed name components are stored in it.

The parameter value is structurally equivalent to the multi-valued N property value: ranks of different name component types are separated by semi-colon, ranks among the same name component types are separated by comma. The rank is an integer number larger than or equal to 1 and indicates the first or nth rank. Its location within the RANKS parameter value ranks the name component value at that same position within the N property value. An empty or absent rank indicates that the rank of its related name component value is undefined. If the RANKS parameter is set, its value **MUST NOT** be the empty string.

Format definition: = %x31-39 ; "1" to "9"

ranks-param = ranks-component 4("; " ranks-component)
ranks-component = rank *(", " rank)
rank = (NONZERO-DIGIT *DIGIT) / ""

Example(s):

```
N;RANKS="2,1":Gómez,Rodriguez;Pablo;;;
    ; The culturally "first" surname is Rodriguez but i
    ; appears at the second position in the N property.

N;RANKS="1,,1":Hamilton,Cartland;Mary,Barbara;;Dame;
    ; The writer Dame Mary Barbara Hamilton Cartland
    ; published as "Barbara Cartland"
```

3.6. PROP-ID Parameter

Parameter name: PROP-ID

Purpose: This parameter identifies a property among all its siblings of the same type.

Description: This parameter uniquely identifies a property among all of its siblings with the same name within a vCard. A valid PROP-ID value must be of 1 and a maximum of 255 octets in size, and it MUST only contain the ASCII alphanumeric characters (A-Za-z0-9), hyphen (-), and underscore (_). The identifier only has the purpose to uniquely identify siblings, its value has no other meaning. If an application makes use of PROP-ID it **SHOULD** assign a unique identifier to each sibling property of the same name within their embedding component. The same identifier **MAY** be used for properties of a different name, and it **MAY** also be assigned to a same-named property that is not a sibling.

Resolving duplicate identifier conflicts is specific to the application. Similarly, handling properties where some but not all siblings have a PROP-ID is assigned, is application-specific.

Format definition: "PROP-ID" "=" 1*255(ALPHA / DIGIT / "-" / "_")

```
Example(s) PROP-ID=p827:
<...remainder of base64-encoded data...>
```

3.7. SERVICE-TYPE Parameter

Parameter name: SERVICE-TYPE

Purpose: To define the online service name associated with a messaging or social media profile.

Description: This parameter **MAY** be specified on a IMPP or SOCIALPROFILE property to name the online service associated with that property value. Its value is case-sensitive, its letter cases **MUST** be preserved.

Several vCard address book implementations currently use an experimental X-SERVICE-TYPE parameter. This specification provides an IANA-registered parameter for the same purpose.

Format definition: param = param-value

Example(s):

SOCIALPROFILE;SERVICE-TYPE=Twitter:https://twitter.com/ietf

4. Security Considerations

This specification extends the vCard Format Specification. The same security considerations as outlined in [Section 9](#) of [\[RFC6350\]](#) apply.

5. IANA Considerations

IANA is requested to add the following entries to the "vCard Properties" registry, defined in Section 10.3.1. of [\[RFC6350\]](#).

| Namespace | Property | Reference |
|-----------|----------------------|--|
| | CONTACT-CHANNEL-PREF | This document, Section 2.1 |
| | CREATED | This document, Section 2.2 |
| | GRAMMATICAL-GENDER | This document, Section 2.3 |
| | LOCALE | This document, Section 2.4 |
| | PRONOUNS | This document, Section 2.5 |
| | SOCIALPROFILE | This document, Section 2.6 |

Table 1: New VCARD Properties

IANA is requested to add the following entries to the "vCard Parameters" registry, defined in Section 10.3.2. of [\[RFC6350\]](#).

| Namespace | Parameter | Reference |
|-----------|--------------|--|
| | AUTHOR | This document, Section 3.1 |
| | AUTHOR-NAME | This document, Section 3.2 |
| | CREATED | This document, Section 3.3 |
| | DERIVED | This document, Section 3.4 |
| | PROP-ID | This document, Section 3.6 |
| | RANKS | This document, Section 3.5 |
| | SERVICE-TYPE | This document, Section 3.7 |

Table 2: New VCARD Parameters

IANA is requested to add the following entries to the "vCard Property Values" registry, defined in Section 10.3.4. of [\[RFC6350\]](#).

| Property | Value | Reference |
|--------------------|-----------|--|
| GRAMMATICAL-GENDER | animate | This document, Section 2.3 |
| GRAMMATICAL-GENDER | female | This document, Section 2.3 |
| GRAMMATICAL-GENDER | inanimate | This document, Section 2.3 |
| GRAMMATICAL-GENDER | male | This document, Section 2.3 |
| GRAMMATICAL-GENDER | neuter | This document, Section 2.3 |

Table 3: New VCARD Property Values

6. References

6.1. Normative References

- [RFC2119] Bradner, S. and RFC Publisher, "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, DOI 10.17487/RFC2119, March 1997, <<https://www.rfc-editor.org/info/rfc2119>>.
- [RFC3986] Berners-Lee, T., Fielding, R., and L. Masinter, "Uniform Resource Identifier (URI): Generic Syntax", STD 66, RFC 3986, DOI 10.17487/RFC3986, January 2005, <<https://www.rfc-editor.org/info/rfc3986>>.
- [RFC5234] Crocker, D., Ed. and P. Overell, "Augmented BNF for Syntax Specifications: ABNF", STD 68, RFC 5234, DOI 10.17487/RFC5234, January 2008, <<https://www.rfc-editor.org/info/rfc5234>>.
- [RFC6350] Perreault, S., "vCard Format Specification", RFC 6350, DOI 10.17487/RFC6350, August 2011, <<https://www.rfc-editor.org/info/rfc6350>>.
- [RFC8174] Leiba, B. and RFC Publisher, "Ambiguity of Uppercase vs Lowercase in RFC 2119 Key Words", BCP 14, RFC 8174, DOI 10.17487/RFC8174, May 2017, <<https://www.rfc-editor.org/info/rfc8174>>.

6.2. Informative References

- [I-D.ietf-calext-jscontact] Stepanek, R. and M. Loffredo, "JSContact: A JSON representation of contact data", Work in Progress, Internet-Draft, draft-ietf-calext-jscontact-07, 10 January 2023, <<https://datatracker.ietf.org/doc/html/draft-ietf-calext-jscontact-07>>.
- [I-D.ietf-calext-jscontact-vcards] Loffredo, M. and R. Stepanek, "JSContact: Converting from and to vCard", Work in Progress, Internet-Draft, draft-ietf-calext-jscontact-vcards-06, 10 January 2023, <<https://datatracker.ietf.org/doc/html/draft-ietf-calext-jscontact-vcards-06>>.

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