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JSContact Version 2.0: A JSON Representation of Contact Data

Abstract

This document defines version "2.0" of JSContact. It defines the uid property of a Card object to be optional, rather than mandatory, as defined previously in version "1.0". All other definitions of JSContact version "1.0" remain as defined in RFC 9553. This document updates RFC 9555 by redefining how to convert the now optional uid property from and to vCard. It also registers the vCard JSCOMPS parameter at IANA, which was defined but not registered in RFC 9555.

Status of This Memo

This is an Internet Standards Track document.

This document is a product of the Internet Engineering Task Force (IETF). It represents the consensus of the IETF community. It has received public review and has been approved for publication by the Internet Engineering Steering Group (IESG). Further information on Internet Standards is available in Section 2 of RFC 7841.

Information about the current status of this document, any errata, and how to provide feedback on it may be obtained at <https://www.rfc-editor.org/info/rfc9982>.

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1. Introduction

JSContact [RFC9553] defines the Card object uid property, a mandatory property that contains a unique identifier for the entity represented by that contact card. For the same purpose, the vCard [RFC6350] contact format defines the UID property, an optional property of a vCard instance. Throughout the rest of this document, the term uid (all lowercase) denotes the JSContact uid property, and the term UID (all uppercase) denotes the vCard UID property.

The uid property being defined as mandatory in JSContact has shown to be applicable for some use cases but turned out to be an issue in other contexts.

1. A stated goal of JSContact is to be compatible with the semantics of the vCard data format (Section 1 of [RFC9553]). But [RFC6350] defines the UID property of a vCard to be optional, and consequently, the semantics of JSContact and vCard differ for such a crucial common element.
2. Address book synchronization protocols, such as CardDAV [RFC6352] and JMAP for Contacts [RFC9610], require the uid property. But other protocols, such as RDAP [RFC9083], have no use for it. JSContact should not require protocols to generate unique identifiers when they are irrelevant or even detrimental to the use case.
3. Converting vCards having no UID property to JSContact is especially problematic: Section 2.1.1 of [RFC9553] requires implementations in this case to generate a unique identifier during conversion but does not require it to be the same across implementations or even one implementation converting the same Card multiple times. A recipient being unaware that the uid property value of such a Card object is ephemeral might refer to it in the members property or relatedTo property of another Card object, introducing invalid relations between contact cards.

2. 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.

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

3. JSContact Version 2.0

This document redefines the uid property of a Card object to become optional. Other than that, the property definition is left unchanged. This change requires the major version of JSContact to change, so this document defines the JSContact version to become "2.0". For further information about versioning JSContact data, see Section 1.9 of [RFC9553].

Implementations MUST create JSContact data that complies with the definitions of version "2.0" (or some later registered version) and MUST set the version property of the JSContact Card object to that

version. They MUST NOT reject a Card object without the uid property as invalid unless specified differently in another document or unless the Card version property has value "1.0". As any valid version "1.0" JSContact Card is also valid according to version "2.0", there is no need to migrate existing JSContact data.

This document does not redefine the vCard UID property.

4. Redefined uid Property

This document redefines the type signature of the uid property, originally defined in Section 2.1.9 of [RFC9553].

OLD:

```
| *uid: String (mandatory).*
```

NEW:

```
| *uid: String (optional).*
```

The remaining property definition is left unchanged, with the following additional paragraph:

```
| A Card without an uid property cannot be referred to as a group  
| member in the members property (Section 2.1.6 of [RFC9553]) or put  
| in relation to another Card object in the relatedTo property  
| (Section 2.1.8 of [RFC9553]).
```

5. Redefined Conversion Rule for the uid Property

This document redefines how to convert the Card uid property from vCard, originally defined in Section 2.1.1 of [RFC9555]. The new conversion rule is as follows:

Implementations that convert a vCard without a UID property (Section 6.7.6 of [RFC6350]) to a Card of version "2.0" or higher MUST NOT generate a unique identifier as a value for the uid property (Section 2.1.9 of [RFC9553]).

When converting a vCard without a UID property to JSContact version "1.0", implementations MUST generate a value for the uid property. How to generate unique identifiers is implementation-specific. Implementations SHOULD generate the same value when generating the same Card multiple times, but as Section 1 describes, this still cannot prevent interoperability issues. Consequently, implementations SHOULD NOT convert to version "1.0" Card objects.

6. Other Changes

This document also registers the JSCOMPS parameter in the IANA "vCard Parameters" registry. The parameter was defined in Section 3.3.1 of [RFC9555] but mistakenly not registered at IANA.

7. IANA Considerations

7.1. Update to the JSContact Version Registry

IANA has updated the "JSContact Version" registry, originally created in Section 3.4 of [RFC9553], by adding the following record:

Major Version	Highest Minor Version	Reference
2	0	RFC 9982

Table 1: JSContact Version Registry

7.2. Update to the JSContact Properties Registry

IANA has updated the "JSContact Properties" registry, originally created in Section 3.5 of [RFC9553]: In the "Reference/Description" column of the uid property, a reference to Section 4 of this document has been added.

7.3. Update to the vCard Parameters Registry

IANA has updated the "vCard Parameters" registry within the "vCard Elements" registry group by adding the following entry:

Namespace	Parameter	Reference
	JSCOMPS	Section 3.3.1 of [RFC9555]

Table 2: vCard Parameters Registry

8. Security Considerations

This document does not provide new security considerations. The security considerations of Section 4 of [RFC9553] apply.

9. References

9.1. Normative References

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