vCard Format Extensions: Representing vCard Extensions Defined by the
Open Mobile Alliance (OMA) Converged Address Book (CAB) Group

Abstract

This document defines extensions to the vCard data format for
representing and exchanging certain contact information. The
properties covered here have been defined by the Open Mobile Alliance
(OMA) Converged Address Book group, in order to synchronize, using
OMA Data Synchronization, contact fields that were not already
defined in the base vCard 4.0 specification.

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 5741.

Information about the current status of this document, any errata,
and how to provide feedback on it may be obtained at

Copyright Notice

Copyright (c) 2012 IETF Trust and the persons identified as the
document authors. All rights reserved.

This document is subject to BCP 78 and the IETF Trust’s Legal
Provisions Relating to IETF Documents
(http://trustee.ietf.org/license-info) in effect on the date of
publication of this document. Please review these documents
carefully, as they describe your rights and restrictions with respect
to this document. Code Components extracted from this document must
include Simplified BSD License text as described in Section 4.e of
the Trust Legal Provisions and are provided without warranty as
described in the Simplified BSD License.
1. Introduction

Synchronization of an Open Mobile Alliance Converged Address Book (OMA-CAB), using Open Mobile Alliance Data Synchronization (OMA-DS), commonly uses vCard as an exchange format between the DS Server and the DS Client. In order to properly perform synchronization of an OMA-CAB, the CAB specification defines some CAB contact fields not already defined in the vCard base specification. This document reuses the definitions found in the OMA-CAB specification and describes them as vCard extensions. The following sections define the necessary Properties and Parameters.

1.1. A Brief Introduction to the Converged Address Book

The Converged Address Book (CAB) Enabler provides consistent mechanisms to manage contact information both in user-facing applications and in support of network-facing activities. At the core of this enabler is a network-based contact repository in which a user can store contact information. That information can be retrieved by any CAB-enabled device. The network-based repository is also able to provide specific contact information to other users and to keep their copies up to date whenever the information is changed.

The CAB Enabler provides synchronization of the contact information available in the user device(s) with the network-based contact repository.
The CAB Enabler also manages the distribution of a user’s own contact information. In essence, a user fills out a Personal Contact Card, which includes all the information a user wishes to store about himself or herself.

Because systems that are supporting the CAB Enabler are likely supporting multiple users, the CAB Enabler also defines a search paradigm that permits other users to query those systems to locate information about the available users.

The CAB Enabler supports many different types of information. It therefore has a data model that is flexible and extensible. It manages traditional types of contact information (such as name, address, email, phone number, mobile number) as well as new types of information (such as websites, blogs, presence subscription references).

1.2. Terminology Used in This Document

Syntax specifications shown here use the augmented Backus-Naur Form (ABNF) as described in [RFC5234] and are specified as in the base vCard specification [RFC6350].

2. vCard Extensions: Properties

The following sections define the CAB Properties.

Note:
Some string-value vCard properties are defined herein for which no specific list of allowed strings is specified. For those properties, it is intended that de facto taxonomies might develop. One vCard can, for example, specify a hobby of "philately", while another uses "stamp collecting", and a third has "old postage stamps". Usage, not specification, may lead to a preference over time for a single term. In general, these are meant to be understood by humans, rather than to be used for automated categorization that might require standard terms and registries.

2.1. Property: EXPERTISE

Namespace:

Property name: EXPERTISE

Purpose: To specify a field of expertise for the object to which the vCard refers.

Value type: A single text value.
Cardinality: *

Property parameters: LEVEL (possible values: "beginner", "average", "expert"), INDEX

Description: This is intended to be a free-form naming of fields of expertise, meant for human consumption, and no specific expertise fields are defined. See the note at the beginning of Section 2.

Format definition:

```
EXPERTISE-param = LEVEL-param / INDEX-param / language-param / pref-param / altid-param / type-param / any-param
```

EXPERTISE-value = text

Examples:

```
EXPERTISE;LEVEL=beginner;INDEX=2:chinese literature
EXPERTISE;INDEX=1;LEVEL=expert:chemistry
```

2.2. Property: HOBBY

Namespace:

Property name: HOBBY

Purpose: To specify the hobbies of the object to which the vCard refers.

Value type: A single text value.

Cardinality: *

Property parameters: LEVEL (possible values: "high", "medium", "low"), INDEX

Description: This is intended to be a free-form naming of hobbies, meant for human consumption, and no specific hobbies are defined. See the note at the beginning of Section 2.
A hobby, as opposed to an interest (see Section 2.3), is an activity that one actively engages in for entertainment, intellectual stimulation, creative expression, or the like.

* "Art" might be a hobby if one actively sculpts or paints.
* "Tennis" might be a hobby if one enjoys playing, rather than just watching, matches.

Format definition:

\[
\text{HOBBY-param} = \text{LEVEL-param} / \text{INDEX-param} / \text{language-param} / \\
\text{pref-param} / \text{altid-param} / \text{type-param} / \text{any-param}
\]

\[
\text{HOBBY-value} = \text{text}
\]

Examples:

HOBBY;INDEX=1;LEVEL=high:reading
HOBBY;INDEX=2;LEVEL=high:sewing

2.3. Property: INTEREST

Namespace:

Property name: INTEREST

Purpose: To specify the interest(s) of the object to which the vCard refers.

Value type: A single text value

Cardinality: *

Property parameters: LEVEL (possible values: "high", "medium", "low"), INDEX

Description: This is intended to be a free-form naming of interests, meant for human consumption, and no specific interests are defined. See the note at the beginning of Section 2.

An interest, as opposed to a hobby (see Section 2.2), is an activity or topic that one finds interesting but doesn’t necessarily actively engage in.
* "Art" might be an interest if one likes looking at art but doesn’t create art.

* "Tennis" might be an interest if one enjoys watching matches but doesn’t play.

Format definition:

```
INTEREST-param =  LEVEL-param / INDEX-param / language-param / 
                 pref-param / altid-param / type-param / 
                 any-param

INTEREST-value =  text
```

Examples:

```
INTEREST;INDEX=1;LEVEL=medium:r&b music
INTEREST;INDEX=2;LEVEL=high:rock ’n’ roll music
```

2.4. Property: ORG-DIRECTORY

Namespace:

Property name: ORG-DIRECTORY

Purpose: To specify a directory of an organization to which the vCard’s entity belongs.

Value type: A single URI value.

Cardinality: *

Property parameters: PREF, INDEX

Description: This is intended to be a URI that can be used to do an organization-directory lookup. Presumably, the entity the vCard represents would be found in the directory, though that isn’t required. This might be used to make it easier to find someone’s coworkers, management chain, and so on, in a company or organizational directory.

How the lookup is done depends upon the URI scheme, and no attempt is made here to specify details of the lookup mechanism. An HTTP URI might, for example, lead
to a web form that’s intended for manual lookup in a browser; thus, this URI might or might not be usable for automated lookup or searching.

Format definition:

```
ORG-DIRECTORY-param =  pref-param / INDEX-param / language-param / pid-param / pref-param / altid-param / type-param / any-param
```

```
ORG-DIRECTORY-value=  uri
```

Examples:

```
ORG-DIRECTORY;INDEX=1:http://directory.mycompany.example.com

ORG-DIRECTORY;PREF=1;INDEX=2:http://ldap.tech.example/o=Example%20Tech,ou=Engineering
```

3. vCard Extensions: Parameters

The following sections define Parameters used within Properties definitions.

3.1. Parameter: INDEX

Namespace:

Parameter name: INDEX

Purpose: Used in a multi-valued property to indicate the position of this value within the set of values.

Description: When a property is multi-valued, INDEX can be used to indicate an ordering or sequence of the values. INDEX values must be strictly positive. Zero is not allowed.

Format definition:

```
INDEX-param =  "INDEX=" INDEX-value
```

```
INDEX-value =  integer
```

Examples:

```
ORG-URI;INDEX=1:http://mycompany.example1.com

ORG-URI;PREF=1;INDEX=2:http://mycompany.example2.com
```
3.2. Parameter: LEVEL

Namespace:

Parameter name: LEVEL

Purpose: Used to indicate a level of expertise, hobby, or interest attained by the object the vCard represents.

Description: Allowable values:

* "beginner", "average", "expert" when used with EXPERTISE
* "high", "medium", "low" when used with HOBBY or INTEREST

Format definition:

LEVEL-param =  "LEVEL=" LEVEL-value

LEVEL-value =  "beginner" / "average" / "expert" / "high" / "medium" / "low"

Examples:

EXPERTISE;LEVEL=beginner:chinese literature

HOBBY;LEVEL=high:reading

INTEREST;LEVEL=medium:r&b music

4. Security Considerations

This document presents no security considerations beyond those in Section 9 of the base vCard specification [RFC6350].
5. IANA Considerations

IANA has added the following entries to the "vCard Properties" registry, defined in [RFC6350] Section 10.3.1.

<table>
<thead>
<tr>
<th>Name-space</th>
<th>Property</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EXPERTISE</td>
<td>RFC 6715, Section 2.1</td>
</tr>
<tr>
<td></td>
<td>HOBBY</td>
<td>RFC 6715, Section 2.2</td>
</tr>
<tr>
<td></td>
<td>INTEREST</td>
<td>RFC 6715, Section 2.3</td>
</tr>
<tr>
<td></td>
<td>ORG-URI</td>
<td>RFC 6715, Section 2.4</td>
</tr>
</tbody>
</table>

IANA has added the following entries to the "vCard Parameters" registry, defined in [RFC6350] Section 10.3.2.

<table>
<thead>
<tr>
<th>Name-space</th>
<th>Parameter</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INDEX</td>
<td>RFC 6715, Section 3.1</td>
</tr>
<tr>
<td></td>
<td>LEVEL</td>
<td>RFC 6715, Section 3.2</td>
</tr>
</tbody>
</table>

IANA has added the following entries to the "vCard Parameter Values" registry, defined in [RFC6350] Section 10.3.4.

<table>
<thead>
<tr>
<th>Property</th>
<th>Parameter</th>
<th>Value</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPERTISE</td>
<td>LEVEL</td>
<td>beginner</td>
<td>RFC 6715, Section 3.2</td>
</tr>
<tr>
<td>EXPERTISE</td>
<td>LEVEL</td>
<td>average</td>
<td>RFC 6715, Section 3.2</td>
</tr>
<tr>
<td>EXPERTISE</td>
<td>LEVEL</td>
<td>expert</td>
<td>RFC 6715, Section 3.2</td>
</tr>
<tr>
<td>HOBBY</td>
<td>LEVEL</td>
<td>high</td>
<td>RFC 6715, Section 3.2</td>
</tr>
<tr>
<td>HOBBY</td>
<td>LEVEL</td>
<td>medium</td>
<td>RFC 6715, Section 3.2</td>
</tr>
<tr>
<td>HOBBY</td>
<td>LEVEL</td>
<td>low</td>
<td>RFC 6715, Section 3.2</td>
</tr>
<tr>
<td>INTEREST</td>
<td>LEVEL</td>
<td>high</td>
<td>RFC 6715, Section 3.2</td>
</tr>
<tr>
<td>INTEREST</td>
<td>LEVEL</td>
<td>medium</td>
<td>RFC 6715, Section 3.2</td>
</tr>
<tr>
<td>INTEREST</td>
<td>LEVEL</td>
<td>low</td>
<td>RFC 6715, Section 3.2</td>
</tr>
</tbody>
</table>

6. Acknowledgments

Thanks to Simon Perreault, Peter Saint-Andre, Cyrus Daboo, and Chris Newman for particularly thorough reviews, which led to a much cleaner submission to the working group.
7. References

7.1. Normative References


7.2. Informative References


Candidate Version 1.0, OMA-TS-CAB-V1_0-20101019-C

Authors’ Addresses

Dany Cauchie
France Telecom - Orange
2 Avenue Pierre Marzin
Lannion  22307
France

Phone: +33 2 96 05 31 16
EMail: dany.cauchie@orange.com

Barry Leiba
Huawei Technologies

Phone: +1 646 827 0648
EMail: barryleiba@computer.org
URI:  http://internetmessagingtechnology.org/

Kepeng Li
Huawei Technologies

Phone: +86 755 28974289
EMail: likepeng@huawei.com