CAB API Requirements

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Open Mobile Alliance

OMA-RD-REST_NetAPI_CAB-V1_0-20130702-A

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1. Scope (Informative)

This document defines the requirements for the OMA Converged Address Book APIs (CAB APIs) V.1.0.

The aim of the OMA CAB APIs RD V1.0 is to address requirements on the network exposure of the functionalities and capabilities of Converged Address Book (CAB) v 1.0 Enabler over HTTP binding.

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2. References

2.1 Normative References

[Autho4API_10] **"**Authorization Framework for Network APIs", Open Mobile Alliance™, OMA-ER-Autho4API-V1_0, URL:http://www.openmobilealliance.org/

[CAB AD] "Converged Address Book Architecture", Version 1.0, Open Mobile Alliance™, OMA-AD-CAB-V1_0, URL:http://www.openmobilealliance.org/

[CAB RD] "Converged Address Book Requirements", Version 1.0, Open Mobile Alliance™, OMA-RD-CAB-V1_0, URL:http://www.openmobilealliance.org/

[CAB TS] "Converged Address Book Specification", Version 1.0, Open Mobile Alliance™, OMA-TS-CAB-V1_0, URL:http://www.openmobilealliance.org/

[CAB XDMS] "Converged Address Book XDM Specification", Version 1.0, Open Mobile Alliance™, OMA-TS-CAB-XDMS-V1_0, URL:http://www.openmobilealliance.org/

[JSON] JavaScript Programming Language, Standard ECMA-262 3rd Edition - December 1999.

[RFC2119] "Key words for use in RFCs to Indicate Requirement Levels", S. Bradner, March 1997, URL:http://www.ietf.org/rfc/rfc2119.txt

2.2 Informative References

[OMADICT] "Dictionary for OMA Specifications", Version 2.9, Open Mobile Alliance™, OMA-ORG-Dictionary-V2_9, URL:http://www.openmobilealliance.org/

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3. Terminology and Conventions

3.1 Conventions

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 [RFC2119].

All sections and appendixes, except “Scope” and “Introduction”, are normative, unless they are explicitly indicated to be informative.

3.2 Definitions

Address Book	A set of Contact Entries, stored by a CAB User, and commonly available to any of the CAB User’s registered clients. [CAB RD]
CAB User	A user of a service that conforms to the CAB Enabler. [CAB RD]
Contact Entry	The information (e.g. name, address, presence subscription information, display name) associated with a contact. [CAB RD]
Contact Share	The action to provide contact information from the Converged Address Book or the own Personal Contact Card to other users, without it being the result of a Contact Subscription. [CAB RD]
Contact Status	Information on the current state of contacts from CAB User’s AB that is provided by the CAB service and cannot be changed by the CAB User. [CAB AD]
Contact Subscription	Means by which a CAB User can request to receive automatic updates of another ‘CAB User’s’ available Personal Contact Card information. [CAB RD]
Contact View	A named subset of the Personal Contact Card of the CAB User to be made available to other users. [CAB RD]
JavaScriptObjectNotation	A lightweight data-interchange format based on a subset of [JSON]
Legacy Formats	Existing standard data formats that are widely used in the industry to store and exchange contact information. Examples include vCard and hCard. [CAB RD]
Personal Contact Card	The collection of personal contact information that a CAB User defines about him/herself. [CAB RD]
Published Contact Card	A subset of a Personal Contact Card, as defined by Contact Views, that is made available to other CAB users (via a Contact Subscription) in the CAB environment. [CAB RD]

3.3 Abbreviations

AB	Address Book
API	Application Programming Interface
CAB	Converged Address Book
OMA	Open Mobile Alliance
PCC	Personal Contact Card
REST	Representational State Transfer
UNI	User-to-Network Interface

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4. Introduction (Informative)

OMA CAB V1.0 has provided the basis for an enriched set of features and data model for the user's Address Book and Personal Contact Card, that is exchanged across network domains. In order to fully leverage on the OMA CAB benefits and to support today's demand for innovative service creation and lightweight UNI interfaces, a set of UNI/long tail APIs targeting the CAB rich feature set is needed.

4.1 Version 1.0

The CAB APIs RD V1.0 captures the functional and non-functional requirements scoping the set of APIs exposing the CAB V 1.0 Enabler data and features.

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5. CAB APIs V1.0 release description (Informative)

CAB service network APIs provide the UNI/long tail application programmatic interfaces. The CAB APIs aim to expose the CAB Enabler functionality as the foundation for new services and applications, utilizing contact information (Address Book and Personal Contact Card).

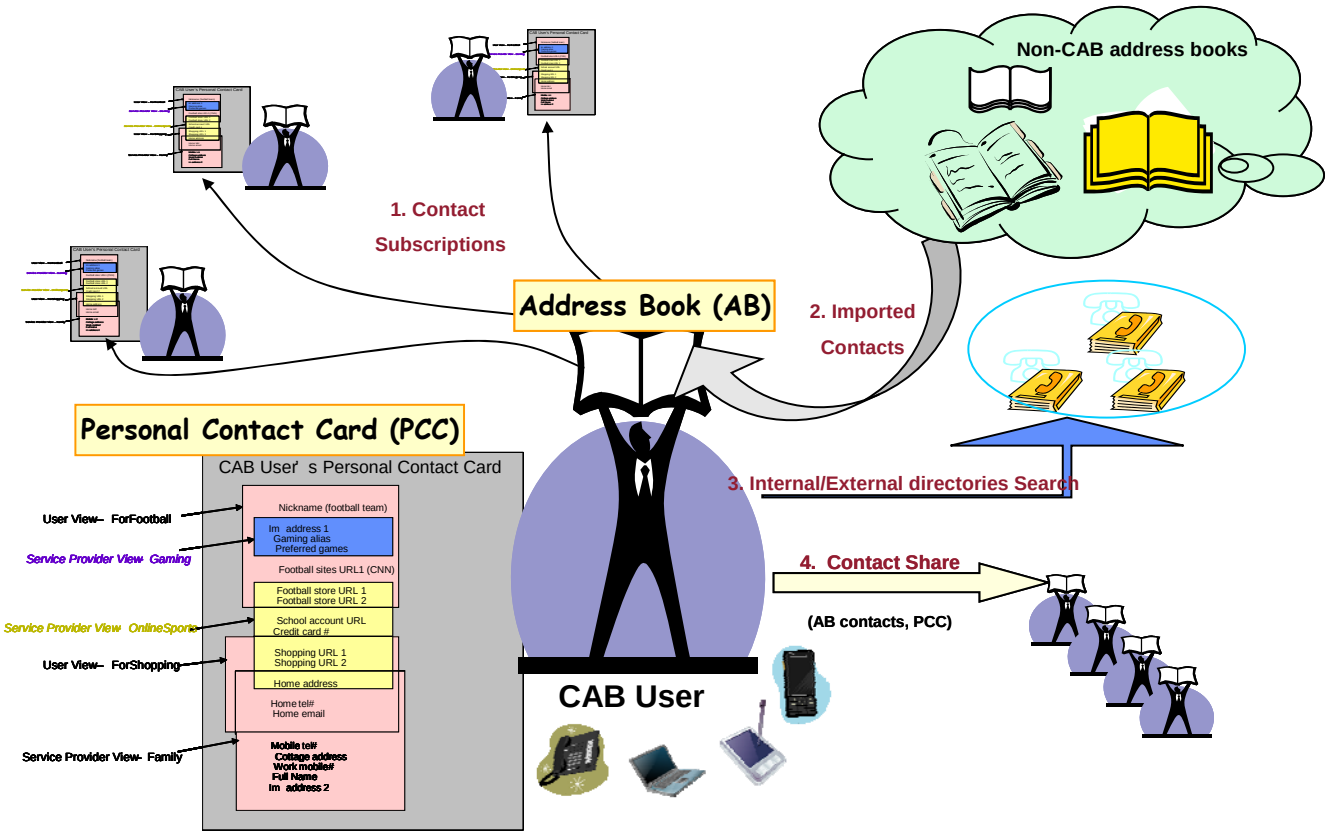

Figure 1: Converged Address Book V1.0 Enabler and value echo-system

Figure 1 provides the high-level view of the CAB 1.0 Enabler and its value ecosystem, which are the source of the CAB APIs. Creation of a wide set of APIs enables Converged Address Book based services to be used in areas of individual, corporation, and society.

5.1 End-to-end Service Description

The CAB APIs V1.0 address a crucial field of open service creation based on the rich data that the user's personal data such as Address Book and Personal Contact Card can offer, while triggering service creation into advanced applications. Addressing the right set of requirements based on such complex features available on the CAB data set targets to decrease significantly the Time-to-Market for new services.

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6. Requirements (Normative)

6.1 High-Level Functional Requirements

This section identifies the high level functional requirements for the CAB APIs, which is based on the CAB 1.0 Enabler. The CAB APIs provide a collection of functional API methods, each being associated to a CAB 1.0 feature that is exposed on the network side.

Label	Description	Release
CAB_APIs-HLF-001	CAB APIs SHALL provide a HTTP based REST binding for all network APIs defined herein.	CAB_APIs v1.0
	The CAB APIs SHALL provide APIs to expose the following CAB 1.0 network based functionalities:	CAB_APIs v1.0
CAB_APIs-HLF-002	a) management operations on CAB Address Book (users management and management of one or more contacts)	CAB_APIs v1.0
CAB_APIs-HLF-003	b) request notification of Address Book (AB) data changes	CAB_APIs v1.0
CAB_APIs-HLF-004	c) management operations on Personal Contact Card (PCC) and Contact Views	CAB_APIs v1.0
CAB_APIs-HLF-005	d) search on PCCs, external directories	CAB_APIs v1.0
CAB_APIs-HLF-006	e) management operations on AB Access permissions	CAB_APIs v1.0
CAB_APIs-HLF-007	f) Subscriptions/notifications to PCC data updates	CAB_APIs v1.0
CAB_APIs-HLF-008	g) format adaptation requests (vcard to CAB Format, vice versa)	CAB_APIs v1.0
CAB_APIs-HLF-009	h) import requests to CAB (towards non-CAB systems)	CAB_APIs v1.0
CAB_APIs-HLF-010	j) Contact Share requests (in CAB Format or vcard, AB and/or PCC)	CAB_APIs v1.0
CAB_APIs-HLF-011	k) Contact Status – management	CAB_APIs v1.0
CAB_APIs-HLF-012	m) Trigger/request an address book synchronization	CAB_APIs v1.0
CAB_APIs-HLF-013	n) Support for synchronization requests of address book	CAB_APIs v1.0
CAB_APIs-HLF-014	CAB APIs SHALL provide a REST binding for all network APIs defined herein.	CAB_APIs v1.0

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CAB_APIs-HLF-015	The CAB APIs SHALL allow the import of PCC data from 3rd party systems	CAB_APIs v1.0
CAB_APIs-HLF-016	The CAB APIs SHALL allow the export of PCC data to 3rd party systems	CAB_APIs v1.0
CAB_APIs-HLF-017	The CAB APIs SHALL allow to request subscription to CAB User's personal profile information in 3rd party systems and to receive associated notifications to keep PCC up-to-date with CAB User's external personal profile information.	CAB_APIs v1.0
CAB_APIs-HLF-018	Subject to the underlying resource capabilities, CAB APIs SHOULD NOT expose the real identities of the user and her/his contacts.	CAB_APIs v1.0
CAB_APIs-HLF-019	CAB APIs SHOULD support application authorization based on OAuth2.0.	CAB_APIs v1.0

Table 1: High-Level Functional Requirements

6.1.1 Security

Security requirements for CAB APIs are out of scope.

6.1.1.1 Authentication

Authentication requirements for CAB APIs are out of scope.

6.1.1.2 Authorization

Due to existing regulations governing how a user can give permission for their customer profile information to be shared, delegated authorization mechanism should be used to secure the explicit permission from the end user. Support for scope values used with authorization framework defined in [Autho4API_10].

6.1.1.3 Data Integrity

Data Integrity requirements for CAB APIs are out of scope.

6.1.1.4 Confidentiality

Confidentiality requirements for CAB APIs are out of scope.

6.1.2 Charging Events

Charging requirements for CAB APIs are out of scope.

6.1.3 Administration and Configuration

Not applicable.

6.1.4 Usability

Not applicable.

6.1.5 Interoperability

Not applicable.

6.1.6 Privacy

Privacy requirements for CAB APIs are out of scope.

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6.2 Overall System Requirements

Not applicable.

6.3 Data Exchange Format Requirements

Label	Description	Release
CAB-DEF-001	The CAB APIs SHALL support JSON as a resource response format.	Future release
CAB-DEF-002	The CAB APIs SHALL support XML as resource response format.	CAB APIs v1.0

Table 2: Data Exchange Format Requirements

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Appendix A. Change History (Informative)

A.1 Approved Version History

Reference	Date	Description
OMA-RD-REST_NetAPI_CAB-V1_0-20130702-A	02 Jul 2013	Status changed to Approved by TP TP Ref # OMA-TP-2013-0208-INP_CAB_APIs_V1_0_ERP_for_Final_Approval

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