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Converged Address Book Requirements

Candidate Version 1.0 – 26 Aug 2008

Open Mobile Alliance

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1. Scope   (Informative)

This document defines the requirements for the Converged Address Book (CAB) Enabler.

2. References

2.1 Normative References

[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 2.6, Open Mobile Alliance™, OMA-ORG-Dictionary-V2_6, URL:http://www.openmobilealliance.org/
[CPM])	OMA Converged IP Messaging , Version 1.0, Open Mobile Alliance™, URL:http://www.openmobilealliance.org
[Presence]	OMA SIMPLE Presence Services, Version 1.1, Open Mobile Alliance™, URL:http://www.openmobilealliance.org

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

Authorized Principal	See [OMADICT]
CAB User	A user of a service that conforms to the CAB Enabler.
Contact Entry	The information (e.g. name, address, presence subscription information, display name) associated with a contact.
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.
Contact Subscription	Means by which a CAB User can request to receive automatic updates of another 'CAB User's' available Personal Contact Card information.
Contact View	A named subset of the Personal Contact Card of the CAB User to be made available to other users.
Converged Address Book	A set of Contact Entries, stored by a CAB User, and commonly available to any of the CAB User's registered clients.
Legacy Formats	Existing standard data formats that are widely used in the industry to store and exchange contact information. Examples include vCard and hCard.
Personal Contact Card	The collection of personal contact information that a CAB User defines about him/herself.
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.
Service	See [OMADICT]

3.3   Abbreviations

CAB	Converged Address Book
CPM	Converged IP Messaging
ISP	Internet Service Provider
MMS	Multimedia Message Service
OMA	Open Mobile Alliance
PC	Personal Computer
PDA	Personal Digital Assistant (electronic handheld information device)
SMS	Short Message Service

4. Introduction   (Informative)

As telecommunications are evolving towards all-IP based networks, many innovative and flexible services emerge to facilitate peer-to-peer and community communications, most using an address book as a launch pad for these services. Users are dealing with many address books (such as device-resident, SIM-resident, service-dependent and ISP-offered) that cause difficult and inconsistent user experiences. In order to support the new communication paradigms and improve the user experience a single address book environment is required.

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

The CAB Enabler is expected to provide synchronization of the contact information available in the user device(s) with the network-based contact repository. It is possible that the limits of storage available on some devices is such that it can not store the whole set of information and it may need to limit either the total number of records or the number of attributes retained per record. The ability to support such limits shows the flexibility CAB Enabler is expected to provide in letting a user manage the contact information collected on the device(s).

The CAB Enabler is also managing the distribution of 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 him or herself. Using Contact Views, defined by either the CAB User or the service provider, the CAB is able to provide different subsets of this information to other users requesting such contact information. Through a Publish/Subscribe paradigm, such information can be provided to other users and when there is any effective change, those other users will be able to receive the updated data. An example of Contact Views usage within the Personal Contact Card is presented in Figure 1.
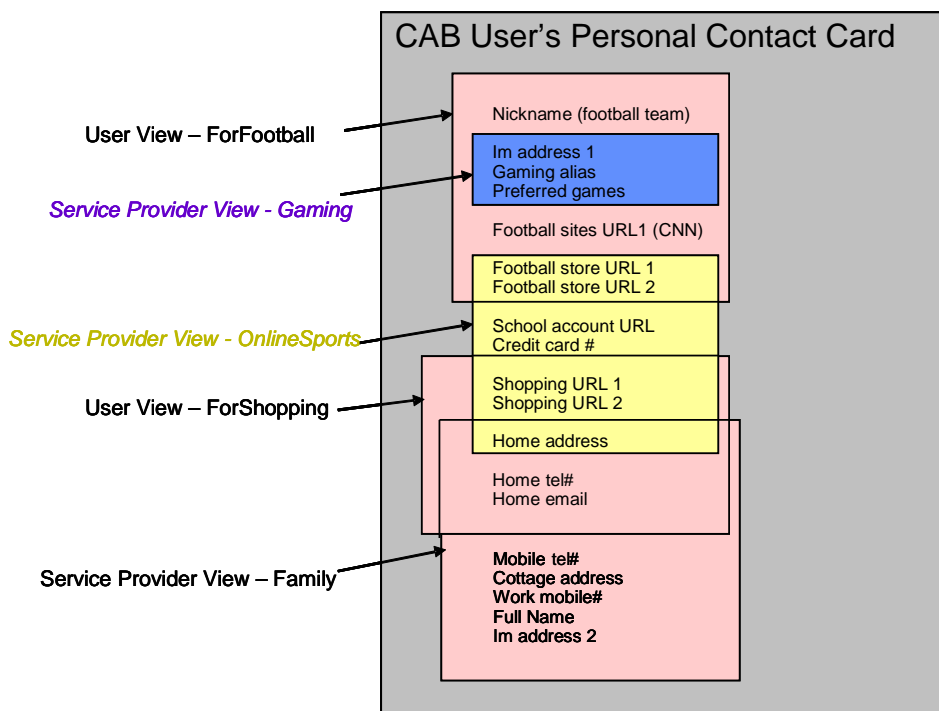

Figure 1: Example of Contact Views in the CAB User's Personal Contact Card

Since systems that are supporting the CAB Enabler are likely supporting multiple users, the CAB Enabler also defines a search paradigm which permits other users to query such a system to locate information about the available users. The information a user wishes to provide in response to such searches can be limited by using a specific Contact View which has a limited set of attributes or they can opt out entirely and not permit their data to be made available to a general search operation.

As the CAB Enabler is expected to support many different types of information it is expected to require a data model that is flexible and extensible. It will be expected to accommodate the traditional types of contact information (e.g. name, address, email, phone number, mobile number, etc.) as well as new types of information (e.g. websites, blogs, presence subscription references, etc.). Such a data model should not preclude support for existing or legacy data formats (e.g. vCard) as a means to exchange data with users not yet served by CAB. Several forms of data availability is being called for with data being shared with other users as well as with data being formatted in a legacy format and usable in a variety of non-CAB-specific exchange activities.

The CAB Enabler, being defined in support of mobile applications, is expected to be designed and developed with efficiency of resources and protection of user privacy as major considerations. In addition, service provider operational needs and user preferences are general principles which should be applied across the enabler whether specifically called out in individual requirements or not.

The environment that the CAB Enabler establishes is expected to be used to enrich the user's experience by the effective use of the data that it makes available to other applications and services. For example, much of the information for a contact will be used to enhance the user's communication experience. This could be by either permitting easy establishment of a communication action or by permitting subscription to presence or capability information. In general, the use of the contact information is out-of-scope of the CAB Enabler and it is up to the other applications and services to perform any needed actions.

Similarly, certain implementation aspects of the CAB Enabler are not covered in these requirements. In particular, support for multiple, concurrent CAB subscriptions in support of different service domains (e.g. personal, corporate) is a possible service model. Whether it is implemented as unified or independent address book(s) is not specifically covered by the CAB Enabler as it is expected that various approaches could be deployed based upon the tools that the CAB Enabler does provide.

The CAB Enabler will re-use as appropriate (e.g. through reference) relevant parts of the associated supporting specifications from OMA, 3GPP, 3GPP2, IETF, TISPAN, etc.

4.1   Version 1.0

Version 1.0 of the CAB Enabler is expected to provide basic support for the network repository of contact information which will anchor the release features. The user device will be able to synchronize with this data.

The CAB enabled device, on behalf of the user, will be able to manage the Personal Contact Card and Contact View data objects which will be stored on the network component and permit it to support the publish and search operations.

For network-side operations, the subscription activity will be supported which will provide data exchange of the contact information and notifications of change.

CAB Enabler will also support simple mapping of attributes to legacy formats (e.g. vCard) to permit exchange of data to non-CAB users.

5. Requirements   (Normative)

5.1   High-Level Functional Requirements

Label	Description	Enabler Release
CAB-HLF-001	The CAB Enabler SHALL provide a network based address book for the CAB User.	CAB V1.0
CAB-HLF-002	The CAB Enabler SHALL define Contact Entry and Personal Contact Card which include contact information such as: • Full name (e.g. title, first, middle, last and suffix) • Display name: An optional descriptive name suggested by the user to identify him/herself (e.g. nickname) • Addressing identifiers (e.g. CPM Address [CPM], instant messaging address, email address, phone number, SIP address, presence subscription address, gaming user identifier…) • Basic personal data (e.g. birth date, description, gender, height, home address) • Extended personal data (e.g. areas of expertise, avatars data, hobbies, interests, photo or video data, title) • Web resources (e.g. homepage URL, weblog URL, publications URL) • Organisational data (e.g. business category, department name, job title, alternative contact or agent)	CAB V1.0
CAB-HLF-003	The CAB Enabler SHALL support list resources (i.e. list URI) in the Converged Address Book.	CAB V1.0
CAB-HLF-004	The CAB Enabler SHALL allow the CAB User to manage (e.g. add/change/delete Contact Entries in his/her Converged Address Book.	CAB V1.0
CAB-HLF-005	The CAB Enabler SHALL, according to the CAB User's preferences and/or service provider's policy, be able to either automatically or by request keep up-to-date all information of the address books of all the CAB-enabled registered devices of a CAB.	CAB V1.0
CAB-HLF-006	The CAB Enabler SHALL support named lists of Contact Entries which can be managed (i.e. created, deleted, edited) by Authorized Principals.	CAB V1.0
CAB-HLF-007	The CAB Enabler SHALL permit a Contact Entry to appear in any number of named lists.	CAB V1.0
CAB-HLF-008	The CAB Enabler SHALL support a mechanism for the CAB User to manage access and modification rights to all or a subset of the contact information stored in his/her Converged Address Book and/or Personal Contact Card to an Authorized Principal.	CAB V1.0
CAB-HLF-009	The CAB MAY support one address book per CPM Address of the CPM User.	CAB V1.0
CAB-HLF-010	The CAB Enabler SHALL be able to receive contact information in vCard format.	CAB V1.0
CAB-HLF-011	The CAB Enabler MAY be able to receive contact information in Legacy Formats other than vCard based on user settings.	CAB V1.0
CAB-HLF-012	The CAB Enabler SHALL be able to notify a CAB User (e.g. User A) when another CAB User (e.g. User B) added him/her (A) to his/her (B) contacts , based on CAB User preferences (A and B) and service provider policy.	CAB V 1.0

CAB-HLF-013	The CAB Enabler SHALL be able to notify a CAB User (e.g. User A) when one of his/her contacts becomes a CAB User (e.g. User B), based on CAB User preferences (Users A and B) and service provider policy.	CAB V 1.0
CAB-HLF-014	The CAB Enabler SHALL allow a CAB User to manage (e.g. modify, delete, access, keep up to date) a local subset of the Converged Address Book (which is resident in the network) on a registered device.	CAB V1.0
CAB-HLF-015	The CAB Enabler SHALL allow a CAB User to retrieve from the network contact information that was previously removed from the device.	CAB V1.0
CAB-HLF-016	The CAB Enabler SHALL be able to provide a CAB User with the CAB status information (e.g. CAB or legacy contact, pending authorisation, corresponding CAB provider, source of contact data, …) of each of his/her contacts, based on contact's preference and service provider policy.	CAB V1.0
CAB-HLF-017	The CAB Enabler SHALL expose to other Enablers (e.g. Messaging enabler, CPM Enabler) an interface to obtain CAB information related to CAB User's contacts, subject to user authorization and/or service provider policies.	CAB V1.0

Table 2: High-Level Functional Requirements

5.1.1   Security

Label	Description	Enabler Release
CAB-SEC-001	The CAB Enabler SHALL use a secure environment for use in the exchange of data between the user device and the network elements of the CAB system.	CAB V1.0
CAB-SEC-002	The CAB Enabler SHALL use a secure environment for use in exchange of data between CAB systems (e.g. between service providers).	CAB V1.0

Table 3: High-Level Functional Requirements – Security Items

5.1.1.1   Authentication

Label	Description	Enabler Release
CAB-AUC-001	The CAB Enabler SHALL support a Principal to be authenticated by the CAB service provider domain.	CAB V1.0
CAB-AUC-002	The CAB Enabler SHALL support a Principal to authenticate the CAB service provider domain.	CAB V1.0
CAB-AUC-003	The CAB Enabler MAY leverage the authentication capabilities of the underlying IP network to authenticate a Principal.	CAB V1.0
CAB-AUC-004	The CAB Enabler MAY leverage the authentication capabilities of the underlying IP network to allow a Principal to authenticate the service provider domain.	CAB V1.0

Table 4: High-Level Functional Requirements – Authentication Items

5.1.1.2 Authorization

Label	Description	Enabler Release
CAB-AUT-001	The CAB Enabler SHALL support a means to prevent unauthorized access to a CAB User's related information stored on their reported stolen or lost mobile device.	CAB V1.0
CAB-AUT-002	The CAB Enabler SHALL prevent unauthorized access to CAB User's related information stored in the network.	CAB V1.0
CAB-AUT-003	The CAB Enabler SHALL allow the CAB User to manage authorisation rules that allow others to obtain information from the Published Contact Card (e.g. to satisfy Contact Subscriptions, contact searches).	CAB V1.0
CAB-AUT-004	The CAB Enabler SHALL allow the CAB User to manage default authorization rule to be applied to any users that are not explicitly identified within the authorization rules.	CAB V1.0

Table 5: High-Level Functional Requirements – Authorization Items

5.1.1.3 Data Integrity

Label	Description	Enabler Release
CAB-INT-001	The CAB Enabler SHALL ensure data integrity of the CAB data within the CAB environment.	CAB V1.0

Table 6: High-Level Functional Requirements – Data Integrity Items

5.1.2 Charging

Label	Description	Enabler Release
CAB-CHRG-001	The CAB Enabler MAY define a set of charging events usable in various business models.	CAB V1.0

Table 7: High-Level Functional Requirements – Charging Items

5.1.3 Administration and Configuration

Label	Description	Enabler Release
CAB-CFG-001	The CAB Enabler SHALL define CAB specific configuration support to permit remote configuration activities of user devices.	CAB V1.0

Table 8: High-Level Functional Requirements – Administration and Configuration Items

5.1.4 Interoperability

Label	Description	Enabler Release
CAB-IOT-001	The CAB Enabler SHALL support interoperation between service providers.	CAB V1.0

Table 9: High-Level Functional Requirements – Interoperability Items

5.1.5 Lawful Interception

NOTE: The capability to intercept CAB telecommunications traffic and related information is always implemented in accordance with national or regional (e.g. European Union) laws or technical regulations applicable to the service provider. Nothing in these requirements, including the definitions, is intended to supplant such applicable laws or regulations.

Label	Description	Enabler Release
CAB-LI-001	The CAB Enabler SHALL allow mechanisms to unobtrusively monitor and report any CAB activity associated with a CAB User when required by a lawful authority.	CAB V1.0
CAB-LI-002	The CAB Enabler SHALL support access of CAB data (Personal Contact Card, Contact Entries, etc.) when required by a lawful authority.	CAB V1.0
CAB-LI-003	When supporting a lawful interception request, the CAB Enabler SHALL be able to provide the available CAB information regardless of the privacy settings set by intercepted CAB Users on their CAB related information.	CAB V1.0
CAB-LI-004	Available and applicable underlying network (e.g. SIP/IP Core) capabilities SHOULD be used to support lawful interception requirements as much as possible (e.g. re-use of 3GPP/3GPP2 lawful interception in case of 3GPP/3GPP2 IMS and/or other national or regional technical specifications).	CAB V1.0

Table 10: High-Level Functional Requirements – Lawful Interception Items

5.1.6 Presence

Label	Description	Enabler Release
CAB-PRS-001	If Presence Information is available, the CAB Enabler SHALL be able to use that information to enhance the user experience.	CAB V1.0

Table 11:High-Level Functional Requirements – Presence Items

5.2 Personal Contact Card Requirements

Label	Description	Enabler Release
CAB- VIEW-001	The CAB Enabler SHALL allow the CAB User to manage (e.g. add/change/delete) his/her Personal Contact Card information.	CAB V1.0

CAB-VIEW-002	The CAB Enabler SHALL allow a CAB User to manage (e.g. create, delete, modify, name) Contact Views of their Personal Contact Card and select the fields that are associated with each Contact View.	CAB V1.0
CAB-VIEW-003	The CAB Enabler SHALL allow a CAB User to associate specific fields in his/her Personal Contact Card to more than one Contact View.	CAB V1.0
CAB-VIEW-004	The CAB Enabler SHALL permit a CAB User to select the Contact View(s) to be provided to a user requesting Personal Contact Card information.	CAB V1.0
CAB-VIEW-005	The CAB Enabler SHOULD allow the service provider to provide a set of Contact Views, each with their associated default set of fields, for use and personalization by each CAB User, subject to service provider policies.	CAB V1.0
CAB-VIEW-006	The CAB Enabler SHALL produce contact information, for distribution to others, by including only fields from the Personal Contact Card that are selected in the associated Contact View with the user making the request.	CAB V1.0
CAB-VIEW-007	The CAB Enabler SHALL utilize a CAB-common data format for providing Personal Contact Card information derived from a Contact View to requests generated from CAB Systems.	CAB V1.0
CAB-VIEW-008	The CAB Enabler MAY provide contact information from the Personal Contact Card in a requested data format (e.g., vCard format, web page).	CAB V1.0
CAB-VIEW-009	The CAB Enabler SHOULD provide a CAB User with the possibility to set the 'Display name' field with a different value per Contact View.	CAB V1.0

Table 12: Contact Views Requirements

5.3   Contact Subscription Requirements

Label	Description	Enabler Release
CAB-SUBS-001	The CAB Enabler SHALL support a mechanism by which other users obtain a Contact Subscription to the Published Contact Card information of a CAB User based on Service Provider policies.	CAB V1.0
CAB-SUBS-002	The CAB Enabler SHALL allow a CAB User to invite other CAB users to subscribe to his/her Published Contact Card information based on service provider's policy.	CAB V1.0
CAB-SUBS-003	The CAB Enabler SHALL provide a means to notify a CAB User about a request for a Contact Subscription, based on user preferences and service provider policy.	CAB V1.0
CAB-SUBS-004	The CAB Enabler SHALL have the capability to generate-notifications for active Contact Subscriptions to subscribing users, associated with Published Contact Card activity when any of the following occur: the value of an attribute in the Contact View changes, an attribute is added or removed from a Contact View or the CAB User`s authorisation rules changes with regards to the subscribing user (e.g. change in the Contact View).	CAB V1.0
CAB-SUBS-005	The CAB Enabler SHALL provide notification to an authorized CAB User when changes occur to Published Contact Card information for which the CAB User has a Contact Subscription, based on CAB User preferences and service provider policy.	CAB V1.0
CAB-SUBS-006	The CAB Enabler SHALL update the CAB User's address book with contact information from Contact Subscriptions, based on the CAB User preferences.	CAB V1.0

| CAB-SUBS-007 | The CAB Enabler SHALL be able to combine information from the Contact Subscriptions with the information that the CAB User customizes about the associated contacts. | CAB V1.0 |

Table 13: Contact Subscription Requirements

5.4 Contact Search Requirements

Label	Description	Enabler Release
CAB-SRCH-001	The CAB Enabler SHALL provide a mechanism to search for information from Personal Contact Cards, subject to CAB users authorization rules and service provider policies.	CAB V1.0
CAB-SRCH-002	The CAB Enabler SHALL support searches between different service provider domains on behalf of CAB Users, subject to CAB User authorization rules and service provider policies.	CAB V1.0
CAB-SRCH-003	The CAB Enabler SHALL support searching a service provider defined network directories (company directory, white page phone book or yellow page phone book etc.) based on service provider policies.	CAB V1.0
CAB-SRCH-004	The CAB Enabler SHALL provide a mechanism to match an incomplete contact information provided by an end-user based on the network directories information supported by service providers. If matching gives more than one result, the end-user would be provided with a list of results.	CAB V1.0
CAB-SRCH-005	The CAB Enabler SHALL support a mechanism to allow a CAB User to include the search results into his/her CAB address book	CAB V1.0

Table 14: Contact Search Requirements

5.5 Contact Share Requirements

Label	Description	Enabler Release
CAB-SHR-001	The CAB Enabler SHALL support a CAB User to Contact Share all or part of any Contact Entry in the CAB User's Converged Address Book, subject to the service provider policy.	CAB V1.0
CAB-SHR-002	The CAB Enabler SHALL allow the CAB User to Contact Share his/her Personal Contact Card information (either completely or partially), subject to the service provider policy.	
CAB-SHR-003	The CAB Enabler SHALL be able to deliver within the CAB environment the information that is Contact Shared with other CAB Users	CAB V1.0
CAB-SHR-004	The CAB Enabler SHALL be able to Contact Share with other users via the submission of a message with the contact information attached in a Legacy Format.	CAB V1.0
CAB-SHR-005	The CAB Enabler SHALL allow a CAB User to establish disposition rules for the handling of Contact Shared information, based on service provider policy.	CAB V1.0

Table 15: Sharing contact information Requirements

5.6 Interworking Requirements

Label	Description	Enabler Release
CAB-IWG-001	The CAB Enabler SHALL allow a CAB User to import contact information via CAB standardized data structure and file type subject to service provider policy.	CAB V1.0
CAB-IWG-002	The CAB Enabler SHALL provide an interworking framework that provides the necessary mechanisms to exchange data with 3rd party address book systems.	CAB V1.0
CAB-IWG-003	The CAB Enabler SHALL have the capability to convey contact information in vCard Legacy Format(s).	CAB V1.0
CAB-IWG-004	The CAB Enabler MAY have the capability to convey contact information in other than vCard Legacy Format(s).	CAB V1.0

Table 16: Interworking Requirements

Appendix A.   Change History   (Informative)

A.1   Approved Version History

Reference	Date	Description
n/a	n/a	No prior version –or- No previous version within OMA

A.2   Candidate Version 1.0 History

Document Identifier	Date	Sections	Description
Draft Versions OMA-RD-CAB-V1_0	11 Oct 2007	1, 2, 3, 5.1, 6.1, 6.1.1	Incorporates input contribution: OMA-REQ-2007-0157R02-INP_WID0155_CAB_ProposedRD_1stDraft
OMA-RD-CAB-V1_0-20071126-D	26 Nov 2007	All sections	Used new templates. Some sub-sections of section 6 changed numbers
		6.1, 6.1.8	Incorporates the following CR : OMA-REQ-CAB-2007-0001R03-CR_ChangingCPM_CAB_REQsToCABreqs Incorporated also the changes agreed in the previous version of the above CR.
OMA-RD-CAB-V1_0-20071128-D	28 Nov 2007	6.1 and 6.1.8	The editors misinterpreted some of the changes in CR 0001R03 about requirements HLF 11, 12, 16 and PRS-003.
OMA-RD-CAB-V1_0-20080107-D	7 Jan 2008	3.2, 6.1	Incorporated the following CR: OMA-REQ-CAB-2007-0009R04-CR_Term_define_and_applied
		6.1	OMA-REQ-CAB-2007-0022R01-INP_Doc_0004R03_Rev_by_Nokia_and_NSN (six new requirements added as requirements CAB-HLF -017 to 023).
OMA-RD-CAB-V1_0-20080109-D	9 Jan 2008	3.2, 5.2, 6.2 and 6.3	OMA-REQ-CAB-2007-0006R02-CR_RD_ContactInfo_UC_Reqs
		6.1	OMA-REQ-CAB-2007-0019R01-CR_corrections
OMA-RD-CAB-V1_0-20080205-D	5 Feb 2008	5.3, 6.4	Incorporated the following CR: OMA-REQ-CAB-2007-0012R2-INP_Sharing_Addree_Book.doc
		5.4, 6.5	OMA-REQ-CAB-2007-0015R3-INP_ISP_Interworking.doc
		3.2 (contact entry definition)	OMA-REQ-CAB-2008-0014-CR_Simplify_for_CAB_definition
OMA-RD-CAB-V1_0-20080213-D	12 Feb 2008	6.1 (HLF-11, 12)	OMA-REQ-CAB-2007-0016R01-CR_Use_of_CPM_Addresses_in_CAB_for_synchronization
		1	OMA-REQ-CAB-2007-0026R03-CR_Basic_CAB_requirements
		3.2, 5.2.1, 6.1, 6.2	OMA-REQ-CAB-2008-0022R01-CR_Legacy_Formats_and_vCard
OMA-RD-CAB-V1_0-20080312-D	04 Mar 2008	6.4	Added missing paragraph from 0012R02.
		3.2	Corrected OMA-REQ-CAB-2008-0014 implementation
		6.1	Corrected OMA-REQ-CAB-2007-0016R01 implementation
		6.1, 6.2	Corrected OMA-REQ-CAB-2008-0022R01 implementation
		6.1, 6.1.6	OMA-REQ-CAB-2008-0017R01
		6.1.7	OMA-REQ-CAB-2008-0031
		6.1 HLF-024 to 028	OMA-REQ-CAB-2008-0035R01
		3.2	OMA-REQ-CAB-2008-0043
OMA-RD-CAB-V1_0-20080313-D	12 Mar 2008	6.3	OMA-REQ-CAB-2008-0026R03-INP_Auto_Complete_Input.doc
OMA-RD-CAB-V1_0-20080319-D	19 Mar 2008	6.1	Incorporated the following CRs: OMA-REQ-CAB-2008-0023R04-CR_Restore_Contact_Information
		6.3	OMA-REQ-CAB-2008-0026R04-INP_Auto_Complete_Input
		6.1.1.4	OMA-REQ-CAB-2008-0040R02-INP_CAB_Data_Lost_terminals
OMA-RD-CAB-V1_0-20080325-D	25 Mar 2008	4	OMA-REQ-CAB-2008-0039R01-CR_CAB_Introduction
		6.1 HLF-018b	OMA-REQ-CAB-2008-0021R03-CR_UpdateNotify

Document Identifier	Date	Sections	Description
		6.1 HLF-030	OMA-REQ-CAB-2008-0036R03-CR_Integration_device_address_book
		6.2 VIEW-013	OMA-REQ-CAB-2008-0047R02-CR_Rules_for_Contact_View_Selection
OMA-RD-CAB-V1_0-20080326-D	26 Mar 2008	3.2, 6.1, 6.4, 6.1.6, 6.2	OMA-REQ-CAB-2008-0067R01-CR_Definition_Alignment
		6.5	OMA-REQ-CAB-2008-0050R02-CR_CAB_adaption_management
		6.1.5	OMA-REQ-CAB-2008-0060R01-CR_CAB_Network_Interface
OMA-RD-CAB-V1_0-20080402-D	2 Apr 2008	5.2.2, 5.2.2.1, 5.2.2.2, 5.2.3, 5.2.4, 5.2.6.1, 5.2.6.2, 6.1	OMA-REQ-CAB-2008-0071R01-CR_Subscription_Invitation
		6.1 HLF-031	OMA-REQ-CAB-2008-0049R03-INP_CAB_Contact_Status
		5.5, 6.1 HLF-032	OMA-REQ-CAB-2008-0029R02-INP_multimedia_presentation
		6.2 VIEW-014	OMA-REQ-CAB-2008-0061R02-CR_Contact_Views_and_Display_Name
		5.2.1, 5.2.2, 5.2.2.1, 5.2.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.7, 6.2, 6.1.6	OMA-REQ-CAB-2008-0044R02-CR_Persona_UC
		3.2, 5.2.1, 5.2.2, 5.2.2.1, 5.2.2.2, 5.2.3, 5.2.5, 5.2.7, 6.1, 6.2	OMA-REQ-CAB-2008-0065R02-INP_Personal_Info_definition
OMA-RD-CAB-V1_0-20080521-D	21 May 2008	1 (scope)	OMA-REQ-CAB-2008-0088R01-CR_CAB_Scope_RDRR.zip
		4, 4.1	OMA-REQ-CAB-2008-0109-CR_RD_A096toA103_Section4.doc
		3.2	OMA-REQ-CAB-2008-0087R01-CR_CAB_User_Definition_RDRR_A045_046.doc
		3.2	OMA-REQ-CAB-2008-0094R01-CR_Personal_and_Publish_Contact_Card.zip
		3.2	OMA-REQ-CAB-2008-0096R01-CR_Legacy_Format_Definition_RDRR_A063
		3.2	OMA-REQ-CAB-2008-0099R01-CR_Definitions_RDRR_A047_A057_to_A062_and__A076
		3.2, 5.1.2.2, 5.1.5, 5.1.6	OMA-REQ-CAB-2008-0107-CR_RD_A066toA068_and_A085toA087_UserCommPref.zip
		3.2, 6.1.8	OMA-REQ-CAB-2008-0108R01-CR_RD_A069toA071_and_A088_UserPrefProfile
		3.2	OMA-REQ-CAB-2008-0126R02-CR_Resolution_to_CAB_RDRR_A053_A054_A056_and_A075
		6.1	OMA-REQ-CAB-2008-0118-CR_HLF001_A187_to_A189
		6.1	OMA-REQ-CAB-2008-0127R01-CR_Resolution_to_CAB_RDRR_A209_to_A212
		6.1	OMA-REQ-CAB-2008-0116R01-CR_Resolution_to_A245_A255.zip
		6.1	OMA-REQ-CAB-2008-0117-CR_Resolution_to_A256_A263
		6.1	OMA-REQ-CAB-2008-0092R01-CR_A283_A288_Resolution_proposal
		6.1	OMA-REQ-CAB-2008-0119R01-CR_Resolution_to_A322_A334.zip
		6.1	OMA-REQ-CAB-2008-0115R01-CR_Resolution_to_A190_A196.zip
		6.1	OMA-REQ-CAB-2008-0122-CR_Resolution_to_A343_A348
		6.1, 6.1.8	OMA-REQ-CAB-2008-0145R01-CR_Resolution_to_A221_A232
		6.1	OMA-REQ-CAB-2008-0123R01-CR_Resolution_to_A349_A357.zip

Document Identifier	Date	Sections	Description
		6.1	OMA-REQ-CAB-2008-0128R01-CR_Resolution_to_CAB_RDRR_Comments_A358_to_A386
		6.1	OMA-REQ-CAB-2008-0093R01-CR_A387_A392_Resolution_proposal
		6.1	OMA-REQ-CAB-2008-0098R01-CR_HLF_030_RDRR_A393_A394_A395_A396
		6.2, 6.5	OMA-REQ-CAB-2008-0146R01-CR_Resolution_to_A519_A528
		6.4	OMA-REQ-CAB-2008-0125R01-CR_Resolution_to_CAB_RD_Review_Comments_A586_to_A590.doc
		6.2	OMA-REQ-CAB-2008-0131R01-CR_CAB_VIEW_0012_RDRR_A532_to_A540.doc
		6.1.1.2, 6.1.6	OMA-REQ-CAB-2008-0143R01-CR_PRV001_A447_to_A454.doc
		6.2	OMA-REQ-CAB-2008-0147R01-CR_Resolution_A529.doc
		6.1	OMA-REQ-CAB-2008-0149R01-CR_CAB_HLF_025.doc
		6.2	OMA-REQ-CAB-2008-0095R01-CR_A497_A498_Resolution_proposal
		6.1.1.4	OMA-REQ-CAB-2008-0101-CR_Confidentiality_RDRR_A433_to_A438
		6.2	OMA-REQ-CAB-2008-0105-CR_CAB_VIEW_13_A541_to_A546
		6.2	OMA-REQ-CAB-2008-0106-CR_CAB_VIEW_11_A530_to_A531
		6.1	OMA-REQ-CAB-2008-0111R02-CR_HLF_012_RDRR_resolution
		6.1	OMA-REQ-CAB-2008-0113R01-CR_HLF_032_RDRR_resolution
		6.1	OMA-REQ-CAB-2008-0134R01-CR_RD_A274toA281_HLF013
		3.2	OMA-REQ-CAB-2008-0103R01-CR_A048_to_A052_Resolution_Proposal
		6.1.7	OMA-REQ-CAB-2008-0142-CR_LI_004_RDRR_A465_A466
		6.1.7	OMA-REQ-CAB-2008-0144-CR_LI_Note_A467
OMA-RD-CAB-V1_0-20080603-D	3 Jun 2008	6.1.7 LI-004	Corrected the implementation of CR OMA-REQ-CAB-2008-0142-CR_LI_004_RDRR_A465_A466
		2 references	Editorial changes: - Deleted entries [OMA Presence] and [OMA XDM] because they are not referenced in the RD. - Added subsection "2.1 Normative references" header to follow the latest template. - Deleted [OMADICT] from the normative references and kept it in the informative references. Definitions in section 3 will require a reference to OMADICT.
		3.2 definitions	Sorted the definitions alphabetically.
		6.1.1.1	OMA-REQ-CAB-2008-0100-CR_Authentication_Requirements__RDRR_A418_to_A425
		5 and Appendix B	OMA-REQ-CAB-2008-0110-CR_RD_A104_NewUseCaseModel
		6.1	OMA-REQ-CAB-2008-0120R02-CR_Resolution_to_A335_A338
		6.3	OMA-REQ-CAB-2008-0140R01-CR_RD_A569toA579_SRCH002andSRCH003
		6.1, 6.3	OMA-REQ-CAB-2008-0114R03-CR_Change_Request
OMA-RD-CAB-V1_0-20080604-D	4 Jun 2008	5.1	OMA-REQ-CAB-2008-0121R04-CR_Resolution_to_A339_A342
		4	OMA-REQ-CAB-2008-0161R01-CR_Personal_Contact_card_figure
		5.2	OMA-REQ-CAB-2008-0163R01-CR_View001_A493_A494
		5.2	OMA-REQ-CAB-2008-0164-CR_View003_A499_A505
OMA-RD-CAB-V1_0-20080618-D	17 Jun 2008		OMA-REQ-CAB-2008-0172R01-CR_HLF_007_A233_A236
OMA-RD-CAB-V1_0-20080619-D	18 Jun 2008	5.1	OMA-REQ-CAB-2008-0130R01-CR_HLF015_A289
		3.2, 5.1, 5.4.1	OMA-REQ-CAB-2008-0160R03-CR_Merging_Contact_Share_and_Contact_Send
OMA-RD-CAB-V1_0-20080623-D	23 Jun 2008	5.4, 5.4.1 and 5.4.2	Added missing changes of OMA-REQ-CAB-2008-0160R03-CR_Merging_Contact_Share_and_Contact_Send change 3

Document Identifier	Date	Sections	Description
		5.1.1.2, 5.2	OMA-REQ-CAB-2008-0151R03-CR_VIEW004_Public_RDRR_A492_to_A508
		5.2	OMA-REQ-CAB-2008-0175R01-CR_VIEW_007_RDRR_514_to_516
		5.3	OMA-REQ-CAB-2008-0167R01-CR_SRCH001_A564_A568
		5.1.1	OMA-REQ-CAB-2008-0136R1-CR_RD_A409toA417_6.1.1
OMA-RD-CAB-V1_0-20080630-D	29 Jun 2008	Several sections	Editorial changes: OMA-REQ-CAB-2008-0202R02-CR_RDRR_comments_20_to_33_A009
		5.4	Added missing changes of OMA-REQ-CAB-2008-0160R03-CR_Merging_Contact_Share_and_Contact_Send change 3
		4	OMA-REQ-CAB-2008-0179R01-CR_CAB_Introduction_A017
		5.1	OMA-REQ-CAB-2008-0169R04-CR_HLF_003_A197_A208
		5.1	OMA-REQ-CAB-2008-0193R01-CR_HLF_017_A301_A303
		5.1	OMA-REQ-CAB-2008-0194R01-CR_HLF_017a_A304_A307_A406
		5.1	OMA-REQ-CAB-2008-0197R01-CR_HLF_031_A397_A400
		5.1.7	A-REQ-CAB-2008-0139R02-CR_RD_A460toA464_LI001toLI003
		5.1.1.4, 5.1.1.2	OMA-REQ-CAB-2008-0133R02-CR_Authorization_A426_to_A430
		5.2	OMA-REQ-CAB-2008-0201-CR_View_005_A509_A511
		5.1, 5.4	OMA-REQ-CAB-2008-0182R01-CR_Dispay_Name_and_VIEW_014_A015
		5.5	OMA-REQ-CAB-2008-0165R02-CR_IWG_A557_A560_A596_A604
		5.1.8	OMA-REQ-CAB-2008-0188-CR_PRS_001_A470_and_A488 (nothing to do)
		5.1.8	OMA-REQ-CAB-2008-0189-CR_PRS_002_A468_to_A477
		5.1.8	OMA-REQ-CAB-2008-0186R02-CR_PRS_003_A478_to_A487
		5.1.8	OMA-REQ-CAB-2008-0187R01-CR_PRS_004
		5.1.5	A-REQ-CAB-2008-0199-CR_IOT_001_A445_A446
		5.3	OMA-REQ-CAB-2008-0200R02-CR_SRCH_004_A580_A582
		5.1, 5.2, 5.3	OMA-REQ-CAB-2008-0177R01-CR_RDRR_Resolution_328,_339_and_555
		5.4	OMA-REQ-CAB-2008-0091R02-CR_A583_Resolution_proposal
		5.1.2	OMA-REQ-CAB-2008-0137R01-CR_RD_A439andA440_6.1.2
		5.1.3	OMA-REQ-CAB-2008-0138R01-CR_RD_A441andA442_6.1.3
		5.1	OMA-REQ-CAB-2008-0159R03-CR_Change_Request
		5.1	OMA-REQ-CAB-2008-0154R01-CR_Lists_In_ContactEntries_AI_012
		5.2	OMA-REQ-CAB-2008-0178R01-CR_SP_defined_Views_AI0018
		5.1.1.3	OMA-REQ-CAB-2008-0198R01-CR_6.1.1.3_A431_A432
OMA-RD-CAB-V1_0-20080715-D	2 Jul 2008	All sections	Incorporated the editorial corrections provided in the different REQ CAB R&A which was held from 1 to 14 July 2008.
		5.1	Incorporated CR OMA-REQ-CAB-2008-0207R03-CR_CR_on_HLF_029
		5.1	Accepted CR OMA-REQ-CAB-2008-0170R02-CR_HLF_005_A213_A220
Candidate version OMA-RD-CAB-V1_0-20080826-C	26 Aug 2008	n/a	Status changed to Candidate by TP: TP ref# OMA-TP-2008-0296-INP_CAB_V1_0_RD_for_Candidate_Approval
		All	General editorial clean-up of styles for publication

Appendix B.   Use Cases   (Informative)

The following uses cases provide a high view of some of the functionality that the CAB Enabler is intended to support. The descriptions do not provide sufficient detail to fully capture the operational expectations, much less the alternative uses or various error conditions that might be experienced.

B.1   Device Updates from Changes to Network Contact Info

This use case covers the situation where updating of entries in the network-based address book storage is propagated to the other devices associated with the CAB User.

B.1.1   Short Description

The CAB User, using one of his devices, updates an entry in his address book. As the data on his device and the information in the network are synchronized, this change is propagated and becomes the 'current' data in the network-based storage. The change is now needed to be reflected on all devices associated with the CAB User.

For devices that are currently active, the change can be sent as part of its synchronization activity. For devices that are not active, they will need to be updated when they become available. Thus the network-based system must 'remember' which devices need the update, this is also considered part of the synchronization functionality.

B.1.2   Market Benefits

Users subscribing to CAB have their data synchronized with the network-based storage, freeing them from the task of updating each device individually. This feature is also performed when the data is revised from other sources (e.g. from Contact Subscriptions to other user's data) which permits the user to develop confidence that they have the latest data on whichever device they may be using.

B.2   Managing the Personal Contact Card

This use case presents the Personal Contact Card and what users would typically use it for.

B.2.1   Short Description

The CAB User has populated their Personal Contact Card with all of their relevant contact information. Should that user subscribe to a new service (e.g. a new messaging service utilizing a new address) they would then edit their Personal Contact Card by using one of their devices and entering the appropriate edit mode. They would add the new addressing information they received as part of their new service. When they save this new data, it would be propagated to the network based storage system which would then update all of the CAB User's devices associated with the CAB service.

Thus, if the CAB User were to subsequently review their Personal Contact Card data on one of their other devices, they would see that it had been updated and would show the information for the new service. The view of the data in the Personal Contact Card would be complete and consistent whether or not a specific device could support any of the services described or not.

B.2.2   Market Benefits

Users subscribing to CAB would have a singular master set of data about themselves constituted in the Personal Contact Card which could be updated from any of their devices. They can thus rely on the CAB system to provide the most up-to-date data to people interested in their contact information and need not worry about older versions sitting on their devices.

B.3   Publish/Subscription of Contact Information

This use case describes how Contact Views will be used to set the information that a CAB User publishes which impacts the users subscribing to the data.

B.3.1   Short Description

The CAB User can establish a set of Contact Views which permit them to have different subsets of information from their Personal Contact Card to be available to other users. The Contact Views are stored by the network-based storage system which permits it to provide the correct attributes to be published to users retrieving data about the CAB User.

An attempt by another user to subscribe to the CAB User's data may lead to the CAB User getting an alert which asks whether the requesting user is to be permitted to have access to their data, and if so, which view. The CAB User may assign the requestor to a specific or default Contact View. The CAB system will remember this assignment so that it can make sure the requesting user gets the correct data.

At some later point in time, a change to an attribute in the Personal Contact Card is made. The CAB system will determine which Contact Views are affected and for all users subscribed to these Contact Views, they will, through the subscription process, get the updated data.

B.3.2   Market Benefits

CAB Users will be able to manage the data which other users get about them. In addition, the CAB system will also provide a consistent approach to propagating changes to their data to the other users who have subscribed to the updates. Users will be freed from manual update activities for those contacts that have subscribed to their information.

B.4   Sharing Contact Information

This use case covers the case where CAB Users share information about other contacts.

B.4.1   Short Description

A CAB User is able to send contact information about a third party to another CAB User. The source CAB User is able to forward the contact information from their address book to the receiving CAB User who can store it in their contact information.

While the contact information is available to the receiving CAB User, the sharing operation does not itself establish any kind of subscription action from the actual contact or the source CAB User. In addition, the data that may be provided may be out-of-date as it provides no specific data from the contact directly.

B.4.2   Market Benefits

The sharing operation permits CAB Users to forward information about other users to each other. From this they can communicate using the information or seek a subscription in which case the data would be kept current.

B.5   Importation of Contact Information from other Systems

This use case presents the case where information from other address book sources can be imported into the CAB system.

B.5.1   Short Description

A CAB User also has contact information in non-CAB repositories. They wish to get that data into their CAB system so they can get the benefits of multi-device updates. They thus retrieve the data in a bulk format (e.g. data file or spreadsheet) which they then process to permit it to be read by their CAB service. The CAB system reads the data and imports the set of contacts provided.

In cases where data in specific fields match data the CAB User already has in their CAB address book, the user is able to merge or delete elements to avoid multiple repetitive records in their CAB data.

B.5.2   Market Benefits

By importing the data from older address book storage systems, the CAB User is able to have all their contact information in their CAB system which may permit the user to drop the use of the older contact storage system. In any case, the CAB User will have a unified set of data available for use by applications that can access their CAB contact information.