Enabler Release Definition for Converged IP Messaging (CPM)

Approved Version 1.0 – 12 Jun 2012

Open Mobile Alliance

OMA-ERELD-CPM-V1_0-20120612-A

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1. Scope

The scope of this document is limited to the Enabler Release Definition of the Converged IP Messaging (CPM) Enabler according to OMA release process and the Enabler Release specification baseline listed in section 5.

2. References

2.1 Normative References

[OMA-CPM-AD] "Converged IP Messaging Architecture", Open Mobile Alliance™, OMA-AD-CPM-V1_0, URL:http://www.openmobilealliance.org/

[OMA-CPM-RD] "Converged IP Messaging Requirements", Open Mobile Alliance™, OMA-RD-CPM-V1_0, URL:http://www.openmobilealliance.org/

[OMA-CPM-SD] "Converged IP Messaging System Description", Open Mobile Alliance™, OMA-TS-CPM_System_Description-V1_0, URL:http://www.openmobilealliance.org/

[OMA-CPM-TS-CONV] "CPM Conversation Functions", Open Mobile Alliance™, OMA-TS-CPM_Conv_Fnct-V1_0, URL:http://www.openmobilealliance.org/

[OMA-CPM-TS-ITW] "CPM Interworking", Open Mobile Alliance™, OMA-TS-CPM_Interworking-V1_0, URL:http://www.openmobilealliance.org/

[OMA-CPM-TS-MSGSTOR] "CPM Message Storage", Open Mobile Alliance™, OMA-TS-CPM_MessageStorage-V1_0, URL:http://www.openmobilealliance.org/

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

[SCRRULES] "SCR Rules and Procedures", Open Mobile Alliance™, OMA-ORG-SCR_Rules_and_Procedures-V1_0, URL:http://www.openmobilealliance.org/

2.2 Informative References

[OMADICT] "Dictionary for OMA Specifications", Open Mobile Alliance™, OMA-ORG-Dictionary-V2_7, 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”, "Release Version Overview" and “Conformance Requirements Notation Details”, are normative, unless they are explicitly indicated to be informative.

The formal notation convention used in sections 8 and 9 to formally express the structure and internal dependencies between specifications in the Enabler Release specification baseline is detailed in [SCRRULES].

3.2 Definitions

CPM Ad-hoc Group	See [OMA-CPM-RD].
CPM Address	See [OMA-CPM-RD].
CPM Conversation	See [OMA-CPM-RD].
CPM Chat Message	See [OMA-CPM-RD].
CPM Message	See [OMA-CPM-RD].
CPM Pre-defined Group	See [OMA-CPM-RD].
CPM Session	See [OMA-CPM-RD].
CPM Session History	See [OMA-CPM-RD].
CPM Standalone Message	See [OMA-CPM-RD].
CPM User	See [OMA-CPM-AD].
Device	See [OMADICT].
Enabler Release	Collection of specifications that combined together form an enabler for a service area, e.g. a download enabler, a browsing enabler, a messaging enabler, a location enabler, etc. The specifications that are forming an enabler should combined fulfil a number of related market requirements.
Immediate Messaging	See [OMADICT].
Media	See [OMA-CPM-RD].
Media Object	See [OMA-CPM-AD].
Media Stream	See [OMA-CPM-AD].
Media Stream Type	See [OMA-CPM-AD].
Media Type	See [OMADICT].
Minimum Functionality Description	Description of the guaranteed features and functionality that will be enabled by implementing the minimum mandatory part of the Enabler Release.
Non-CPM Communication Service	See [OMA-CPM-RD].
Principal	See [OMADICT].
User Preferences Profile	See [OMA-CPM-RD].
VAS Application	See [OMA-CPM-AD].

3.3 Abbreviations

CPM	Converged IP Messaging

ERDEF	Enabler Requirement Definition
ERELD	Enabler Release Definition
MMS	Multimedia Messaging Service
OMA	Open Mobile Alliance
SD	System Description
SMS	Short Message Service
VAS	Value Added Service

4. Release Version Overview

The CPM Enabler provides common building blocks, by reuse of existing blocks and by defining new ones, to allow for both the consolidation of present and the creation of future interpersonal interactive multimedia communication services which accommodate different user experiences such as deferred and Immediate Messaging, session-based messaging, and half duplex/full duplex conferencing.

As CPM is architected as an extensible, phased framework, not all of the following items are supported in this release. More detail on this release can be found in the next subsection.

CPM supports one-to-one, one-to-many personal communications, and also communication with VAS Applications.

CPM enables the creation of services that allow users to:

- communicate without knowing what network access technology is being used,
- have parallel conversations,
- concurrently associate several devices with themselves,
- personalise their services by setting preferences to indicate, for example, which device(s) messages should be sent to,
- store any type of message and Media in the network, and
- seamlessly make the transition from legacy voice, video and messaging services such as MMS and SMS to CPM based services by providing interworking between CPM and these legacy services.

The efficient use of resources (e.g. radio bandwidth) by all of CPM's features will be taken into consideration in the design of the CPM Enabler.

4.1 Version 1.0 Functionality

CPM Enabler version 1.0 offers:

- support for the following CPM conversation requirements:
  - Immediate Messaging and deferred delivery messaging (with temporary server storage and subsequent delivery).
  - Exchanging files with multimedia contents after explicit recipient authorization (file transfer feature).
  - One-to-one and one-to-many CPM Conversations among CPM Users with the selection of any kind of Media (single or multiple).
  - Add or remove Media Streams at the CPM Session initiation and at any time during a CPM Session.
  - Add or remove users at any time during a CPM Session.
- support for discrete (e.g. text, image, video clip, audio clip, voice clip, binary file) Media Types and continuous (e.g. bidirectional voice, streaming video) Media Stream Types.
- support for the initiation of CPM Conversations for CPM Pre-defined Groups and CPM Ad-hoc Groups, which can be modified during CPM Conversations.
- support for CPM Users to set up several User Preferences Profiles like Office, Home, Meeting, etc. to which the preferences of the CPM User are associated.
- an environment supporting multiple CPM Addresses and multiple Devices aiming for best user experience in today's heterogeneous world for services, networks and Devices.
- interaction with the Presence Enabler.

- support for interworking with Non-CPM Communication Services.
- inclusion of a network-based storage for CPM Standalone Messages and CPM Session Histories, including any Media Objects attached to them. All these data can be synchronized to all the Devices of the CPM User. The storage capabilities are subject to the preferences of the CPM User and service provider policies.
- support for interoperability between multiple networks, i.e. CPM Conversations between Principals from different CPM service providers.

5. Document Listing for CPM

This section is normative.

Doc Ref	Permanent Document Reference	Description
Requirement Document		
[OMA-CPM-RD]	OMA-RD-CPM-V1_0-20120612-A	Requirement Document of the CPM Enabler
Architecture Document		
[OMA-CPM-AD]	OMA-AD-CPM-V1_0-20120612-A	Architecture Document of the CPM Enabler
Technical Specifications		
[OMA-CPM-TS-CONV]	OMA-TS-CPM_Conv_Fnct-V1_0-20120612-A	Specification that defines the CPM Controlling Function and the Participating Function, for client & server.
[OMA-CPM-TS-ITW]	OMA-TS-CPM_Interworking-V1_0-20120612-A	Specification that defines the CPM Interworking Selection Function and the Interworking Function.
[OMA-CPM-TS-MSGSTOR]	OMA-TS-CPM_MessageStorage-V1_0-20120612-A	Specification that defines the CPM Message Storage Functions, for client & server.
[OMA-CPM-SD]	OMA-TS-CPM_System_Description-V1_0-20120612-A	Specification that describes system concepts, defines central data elements, and provides related procedures of the CPM Enabler.
Supporting Files		
	None identified	

Table 1: Listing of Documents in CPM Enabler

6. OMNA Considerations

CPM includes the following OMNA item:

1. PUSH Application Id
    a. Number: 0x15
    b. URN: x-oma-application:cpm.ua
    c. Description: OMA CPM

7. Conformance Requirements Notation Details

This section is informative

The tables in following chapters use the following notation:

Item: Entry in this column MUST be a valid ScrItem according to [SCRRULES].

Feature/Application: Entry in this column SHOULD be a short descriptive label to the **Item** in question.

Requirement: Expression in the column MUST be a valid TerminalExpression according to [SCRRULES] and it MUST accurately reflect the architectural requirement of the **Item** in question.

8. ERDEF for CPM - Client Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-CPM-C-001-M	CPM Client	CPM-CF:MCF
OMA-ERDEF-CPM-C-002-O	CPM Message Storage Client	CPM-TS-MS:MCF

Table 2: ERDEF for CPM Client-side Requirements

9. ERDEF for CPM - Server Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-CPM-S-001-M	CPM Participating Function	CPM-CF-PF:MSF
OMA-ERDEF-CPM-S-002-M	CPM Controlling Function	CPM-CF-CF:MSF
OMA-ERDEF-CPM-S-003-O	Message Storage Server	CPM-TS-MS:MSF
OMA-ERDEF-CPM-S-004-O	Interworking Selection Function	CPM-TS-Isf:MSF
OMA-ERDEF-CPM-S-005-O	Interworking Function	CPM-TS-Int:MSF

Table 3: ERDEF for CPM Server-side Requirements

Appendix A. Change History (Informative)

A.1 Approved Version 1.0 History

Reference	Date	Description
OMA-ERELD-CPM-V1_0-20120612-A	12 Jun 2012	Status changed to Approved by TP: OMA-TP-2012-0221R01-INP_CPM_V1_0_ERP_for_Final_Approval