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Enabler Release Definition for Enhanced Visual Voice Mail (EVVM)

Candidate Version 1.0 – 07 Aug 2012

Open Mobile Alliance
OMA-ERELD-EVVM-V1_0-20120807-C

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1. Scope

The scope of this document is limited to the Enabler Release Definition of EVVM v1.0 according to OMA Release process and the Enabler Release specification baseline listed in section 5.

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
[SCRRULES]	"SCR Rules and Procedures", Open Mobile Alliance™, OMA-ORG-SCR_Rules_and_Procedures, URL:http://www.openmobilealliance.org/
[OMA EVVM_RD]	"Enhanced Visual Voice Mail Requirements", Open Mobile Alliance™, OMA-RD-EVVM-V1_0, URL: http://www.openmobilealliance.org/
[OMA EVVM ER]	"Enhanced Visual Voice Mail Architecture and Technical Specification", Open Mobile Alliance™, OMA-ER-EVVM-V1_0, URL: http://www.openmobilealliance.org/
[OMA EVVM DDF]	"EVVM Managed Object ddf", Version 2.0, Open Mobile Alliance™, OMA-SUP-MO_EVVM-V1_0, URL: http://www.openmobilealliance.org
[OMA EVVM MO]	"Enhanced Visual Voice Mail Management Object", Open Mobile Alliance™, OMA-TS-EVVM_MO-V1_0, URL: http://www.openmobilealliance.org
[OMA EVVM XDM]	"EVVM XDM Specification", Open Mobile Alliance™, OMA-TS-EVVM-XDM-V1_0, URL: http://www.openmobilealliance.org/
[OMA EVVM XSD-DEAC]	"XML Schema Definition: EVVM Deactivation Notification", Open Mobile Alliance™, OMA-SUP-XSD_EVVM_DEAC-V1_0, URL: http://www.openmobilealliance.org
[OMA EVVM XSD-PREF]	"XML Schema Definition: EVVM Preferences Notification", Open Mobile Alliance™, OMA-SUP-XSD_EVVM_PREF-V1_0, URL: http://www.openmobilealliance.org
[OMA EVVM XSD-SYNC]	"XML Schema Definition: EVVM Synchronization Notification", Open Mobile Alliance™, OMA-SUP-XSD_EVVM_SYNC-V1_0, URL: http://www.openmobilealliance.org
[OMA EVVM XSD-TRAN]	"XML Schema Definition: EVVM Transcription Notification", Open Mobile Alliance™, OMA-SUP-XSD_EVVM_TRAN-V1_0, URL: http://www.openmobilealliance.org

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/

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

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.
Minimum Functionality Description	Description of the guaranteed features and functionality that will be enabled by implementing the minimum mandatory part of the Enabler Release.

3.3 Abbreviations

ERDEF	Enabler Requirement Definition
ERELD	Enabler Release Definition
EVVM	Enhanced Visual Voice Mail
GSMA	GSM (Groupe Spéciale Mobile) Association
MCF	Mandatory Client Features
MMS	Multimedia Messaging Service
MSF	Mandatory Server Features
OMA	Open Mobile Alliance
OMNA	Open Mobile Naming Authority
OMTP	Open Mobile Terminal Platform
SMS	Short Message Service
VM	Voice Mail
VVM	Visual Voice Mail

4. Release Version Overview

This document defines teh components that consititute the Enhanced Visual Voice Mail (EVVM) Version 1.0 Enabler.

An EVVM user is capable of managing and handling his/her voicemails by exploiting the following enhanced functionalities compared to GSMA/OMTP VVM V1.3:

An EVVM user is able to create an EVVM voicemail locally at his/her EVVM client and send it to the recipient's voicemail box via the interactions between the EVVM client and EVVM server. The EVVM client SHALL include the EVVM user identifier of the recipient when sending a voicemail. If the recipient is located in a remote EVVM environment, this voicemail will be sent first to the home EVVM server, then routed to the remote EVVM server and finally deposited to the recipient's voicemail box.

An EVVM user is able to access EVVM-based services with multiple devices (e.g., a fixed/mobile phone, a desktop/laptop computer, a PDA). Multiple identifiers of various types (e.g., phone number, email address, SIP URI) can be associated with his/her EVVM VM box. He/she must be authenticated once for EVVM-based services with any one of the identifiers associated with his/her VM box. After a successful authentication, he/she can manage any VM boxes authorized to him/her and he/she can choose to identify himself/herself as the sender with any of the associated identifiers to send/forward voicemails... Other users can send voicemails using any of the identifiers.

An EVVM voicemail can contain several discrete media items (e.g., audio clips, text, images, video clips). An EVVM user SHALL be able to add a background audio item and send it together with his/her voicemail. The recipient's EVVM client SHALL be able to play simultaneously a voicemail and its associated background media, if present, at the recipient's EVVM client.

An EVVM user is able to request a voicemail to be delivered at a future time. The EVVM client SHALL be able to include a delivery time in the voicemail. The EVVM server SHALL deliver the voicemail at the designated delivery time, if present.

Upon request of an EVVM user, the EVVM client SHALL include in a voicemail a Reply-to Indication containing the EVVM user/client identifier by which the voicemail recipient can reply or call back instead of replying or calling back by the EVVM user identifier that the voicemail was sent from. With the EVVM client identifier, the recipient can reply to or call back a certain device with which the sender expects to be reached.

An EVVM user is able to send a stored EVVM voicemail without having to download it to the device. The EVVM client SHALL be able to include a reference to a stored voicemail in the EVVM voicemail to be sent out.

Upon receiving an EVVM voicemail containing a reference to a stored voicemail, the EVVM server SHALL fetch the voicemail referred to by the reference and replace the reference with the stored voicemail in the received voicemail.

An EVVM user is able to recall his/her voicemail deposited to the recipient's voicemail box. If the EVVM user requests to recall his/her voicemail, the EVVM client SHALL send a recalling request to the EVVM server. If the voicemail has not been accessed, the EVVM server SHALL abandon all the succeeding processing with respect to this voicemail.

An EVVM user is able to request forwarding VMs via MMS/email as voice, or via SMS/MMS/email as text after voice-to-text conversion (transcription), if needed. A VM can be converted into a SMS/MMS/email message and forwarded to a SMS/MMS/email system by an EVVM forwarding gateway, which is also responsible for converting a returned SMS/MMS/email delivery/read report into an EVVM delivery/read report and forwarding it to the sender of the original VM.

4.1 Version 1.0 Functionality

In addition to the GSMA/OMTP VVM 1.3 features, EVVM provides the following new features/functionality:

- customizable user greetings including conflict resolution
- extension of voice mail to multi-mode access networks (e.g., LTE deployment)
- multi-device supports
- forwarding voice mails

- request future delivery

- storage of sent voice mails

- support for various audio codecs

- text to speech conversion

- user preferences

- referencing voice mail parts

- support confidentiality of sensitive notification content

5. Document Listing for EVVM Enabler V1.0

This section is normative.

Doc Ref	Permanent Document Reference	Description
Requirement Document		
[EVVM_RD]	OMA-RD-EVVM-V1_0-20120807-C	Requirement Document for EVVM Enabler
Architecture and Technical Specification Documents		
[EVVM_ER]	OMA-ER-EVVM-V1_0-20120807-C	Architecture and Technical Specification Document for EVVM Enabler
[OMA EVVM MO]	OMA-TS-EVVM_MO-V1_0-20120807-C	Specification that describes the EVVM Managed Object
[EVVM_XDMS_TS]	OMA-TS-EVVM_XDM-V1_0-20120807-C	Specification that describes teh EVVM XDM Application Usage
Supporting Files		
[OMA EVVM DDF]	OMA-SUP-MO_EVVM-V1_0-20120807-C	Device Description File for EVVM MO. It is aligned with the [OMA EVVM MO] spec. Working file in Managed Object directory: file: evvm-mo-v1_0.ddf path:http://www.openmobilealliance.org/tech/omna/evvm_mo
[XSD_CP]	OMA-SUP-XSD_EVVM_CP-V1_0-20120807-C	XML schema definitions for EVVM Client Preferences Working file in schema directory: file: evvm-cp-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[XSD_GSP]	OMA-SUP-XSD_EVVM_GSP-V1_0-20120807-C	XML schema definitions for EVVM Global Service Preferences Working file in schema directory: file: evvm-gsp-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[XSD_SSP]	OMA-SUP-XSD_EVVM_SSP-V1_0-20120807-C	XML schema definitions for EVVM Subscription-specific Service Preferences Working file in schema directory: file: evvm-ssp-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[XSD_UP]	OMA-SUP-XSD_EVVM_UP-V1_0-20120807-C	XML schema definitions for EVVM User Preferences Working file in schema directory: file: evvm-up-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[XSD_DEAC]	OMA-SUP-XSD_EVVM_DEAC-V1_0-20120807-C	XML schema definitions for EVVM Deactivation Notification Working file in schema directory: file: evvm-deac-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[XSD_PREF]	OMA-SUP-XSD_EVVM_PREF-V1_0-20120807-C	XML schema definitions for EVVM Preferences Notification Working file in schema directory: file: evvm-pref-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles

[XSD_SYNC]	OMA-SUP-XSD_EVVM_SYNC-V1_0-20120807-C	XML schema definitions for EVVM Synchronization Notification Working file in schema directory: file: evvm-sync-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[XSD_TRAN]	OMA-SUP-XSD_EVVM_TRAN-V1_0-20120807-C	XML schema definitions for EVVM Transcription Notification Working file in schema directory: file: evvm-tran-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles

Table 1: Listing of Documents in EVVM V1.0 Enabler

6. OMNA Considerations

The OMNA portal needs to add and maintain the following MO into OMNA Device Management (DM) Management Object (MO) Registry:

MO Identifier	Description	Owner	Version	MO DDF	MO Spec
urn:oma:mo:oma-evvm:1.0	DDF Document for EVVM Managed Object	OMA	V1.0	evvm-mo-v1_0.ddf	OMA-TS-EVVM_MO-V1_0

7. Conformance Requirements Notation Details

N/A

8. ERDEF for EVVM V1.0 - Client Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-EVVM-C-001-M	IMAP Protocols, EVVM specific XCAP application usages, SMS, OMA PUSH	[EVVM_ER]:MCF and [EVVM_XDMS_TS] MCF

Table 2: ERDEF for EVVM V1.0 Client-side Requirements

9. ERDEF for EVVM V1.0 - Server Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-EVVM-S-001-M	IMAP Protocols, EVVM specific XCAP application usages, SMS, OMA PUSH	[EVVM_ER]: MSF [EVVM_XDMS_TS]: MSF

Table 3: ERDEF for EVVM V1.0 Server-side Requirements

Appendix A.   Change History   (Informative)

A.1   Approved Version History

Reference	Date	Description
n/a	n/a	No previous version within OMA

A.2   Draft/Candidate Version 1.0 History

Document Identifier	Date	Sections	Description
Draft Versions OMA-ERELD-EVVM-V1_0	18 Jan 2011	all	Initial baseline as agreed in "OMA-COM-EVVM-2011-0007R01-INP_ERELD_Baseline"
	25 Jan 2011	5	Changes to OMA-RD-EVVM-V1_0 Section 5 updated to reflect this
	28 Mar 2011	1, 2.2, 3.2, 3.3, 5	Applied: OMA-COM-EVVM-2011-0044R01-CR_RDRR_Comment_B001_ERELD_Scope OMA-COM-EVVM-2011-0045R01-CR_RDRR_Commonts_B003_B004_ERELD_Sec3 OMA-COM-EVVM-2011-0046R01-CR_RDRR_Comment_B005_ERELD_Sec5
	15 Apr 2011	5	Document Listing updated
	26 Apr 2011	5	Document Listing updated
Candidate Version OMA-ERELD-EVVM-V1_0	11 May 2011	N/A	Status changed to Candidate by TP TP ref# OMA-TP-2011-0163-INP_EVVM_V1_0_RD_for_Candidate_Approval
Draft Versions OMA-ERELD-EVVM-V1_0	20 Mar 2012	All	Document Listing updated 2012 template applied
	30 Mar 2012	All	Incorporates changes as per agreed input: OMA-COM-EVVM-2012-0075-INP_ERELD_EVVM_V1_0_baseline
	03 May 2012	4.1	Incorporated change as per agreed input: OMA-COM-EVVM-2012-0098-CR_DTAG_CONR_ERELD_updates
	28 Jun 2012	2, 3.3, 5, 6, 7	Incorporates changes as per agreed input: OMA-COM-EVVM-2012-0186R01-CR_CONRR_ERELD_M004 OMA-COM-EVVM-2012-0197-CR_OMA_DM_on_ERELD
	17 Jul 2012	5	Document Listing updated prior to closing CONR
Candidate Version OMA-ERELD-EVVM-V1_0	07 Aug 2012	All	Status changed to Candidate by TP: OMA-TP-2012-0297-INP_EVVM_V1_0_ERP_for_Candidate_Approval