



Enabler Release Definition for Gateway Management Object (GwMO)

Candidate Version 1.0 – 02 Nov 2010

Open Mobile Alliance
OMA-ERELED-GwMO-V1_0-20101102-C

Use of this document is subject to all of the terms and conditions of the Use Agreement located at <http://www.openmobilealliance.org/UseAgreement.html>.

Unless this document is clearly designated as an approved specification, this document is a work in process, is not an approved Open Mobile Alliance™ specification, and is subject to revision or removal without notice.

You may use this document or any part of the document for internal or educational purposes only, provided you do not modify, edit or take out of context the information in this document in any manner. Information contained in this document may be used, at your sole risk, for any purposes. You may not use this document in any other manner without the prior written permission of the Open Mobile Alliance. The Open Mobile Alliance authorizes you to copy this document, provided that you retain all copyright and other proprietary notices contained in the original materials on any copies of the materials and that you comply strictly with these terms. This copyright permission does not constitute an endorsement of the products or services. The Open Mobile Alliance assumes no responsibility for errors or omissions in this document.

Each Open Mobile Alliance member has agreed to use reasonable endeavors to inform the Open Mobile Alliance in a timely manner of Essential IPR as it becomes aware that the Essential IPR is related to the prepared or published specification. However, the members do not have an obligation to conduct IPR searches. The declared Essential IPR is publicly available to members and non-members of the Open Mobile Alliance and may be found on the “OMA IPR Declarations” list at <http://www.openmobilealliance.org/ipr.html>. The Open Mobile Alliance has not conducted an independent IPR review of this document and the information contained herein, and makes no representations or warranties regarding third party IPR, including without limitation patents, copyrights or trade secret rights. This document may contain inventions for which you must obtain licenses from third parties before making, using or selling the inventions. Defined terms above are set forth in the schedule to the Open Mobile Alliance Application Form.

NO REPRESENTATIONS OR WARRANTIES (WHETHER EXPRESS OR IMPLIED) ARE MADE BY THE OPEN MOBILE ALLIANCE OR ANY OPEN MOBILE ALLIANCE MEMBER OR ITS AFFILIATES REGARDING ANY OF THE IPR'S REPRESENTED ON THE “OMA IPR DECLARATIONS” LIST, INCLUDING, BUT NOT LIMITED TO THE ACCURACY, COMPLETENESS, VALIDITY OR RELEVANCE OF THE INFORMATION OR WHETHER OR NOT SUCH RIGHTS ARE ESSENTIAL OR NON-ESSENTIAL.

THE OPEN MOBILE ALLIANCE IS NOT LIABLE FOR AND HEREBY DISCLAIMS ANY DIRECT, INDIRECT, PUNITIVE, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE USE OF DOCUMENTS AND THE INFORMATION CONTAINED IN THE DOCUMENTS.

© 2010 Open Mobile Alliance Ltd. All Rights Reserved.

Used with the permission of the Open Mobile Alliance Ltd. under the terms set forth above.

Contents

- 1. SCOPE4
- 2. REFERENCES5
 - 2.1 NORMATIVE REFERENCES5
 - 2.2 INFORMATIVE REFERENCES5
- 3. TERMINOLOGY AND CONVENTIONS6
 - 3.1 CONVENTIONS6
 - 3.2 DEFINITIONS6
 - 3.3 ABBREVIATIONS6
- 4. RELEASE VERSION OVERVIEW7
 - 4.1 VERSION 1.0 FUNCTIONALITY7
- 5. DOCUMENT LISTING FOR GWMO8
- 6. OMNA CONSIDERATIONS9
- 7. CONFORMANCE REQUIREMENTS NOTATION DETAILS10
- 8. ERDEF FOR GWMO - CLIENT REQUIREMENTS11
- 9. ERDEF FOR GWMO - SERVER REQUIREMENTS12
- APPENDIX A. CHANGE HISTORY (INFORMATIVE)13
 - A.1 APPROVED VERSION HISTORY13
 - A.2 DRAFT/CANDIDATE VERSION 1.0 HISTORY13

Figures

No table of figures entries found.

Tables

- Table 1: Listing of Documents in GwMO Enabler8
- Table 2: ERDEF for GwMO Client-side Requirements11
- Table 3: ERDEF for GwMO Server-side Requirements12

1. Scope

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

2. References

2.1 Normative References

- [GwMOAD] “OMA DM Gateway Management Object Architecture, Version 1.0”, Open Mobile Alliance™, OMA-AD-GwMO-V1_0, [URL:http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [GwMORD] “OMA DM Gateway Management Object Requirements, Version 1.0”, Open Mobile Alliance™, OMA-RD-GwMO-V1_0, [URL:http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [GwMOTS] “OMA DM Gateway Management Object Technical Specification, Version 1.0”, Open Mobile Alliance™, OMA-TS-GwMO-V1_0, [URL:http://www.openmobilealliance.org/](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](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/](http://www.openmobilealliance.org/)

2.2 Informative References

- [OMADICT] “Dictionary for OMA Specifications”, Version 2.7, Open Mobile Alliance™, OMA-ORG-Dictionary-V2_7, [URL:http://www.openmobilealliance.org/](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
ERELED	Enabler Release Definition
OMA	Open Mobile Alliance
OMNA	Open Mobile Naming Authority

4. Release Version Overview

The GwMO enabler allows an OMA-DM Server to manage devices that are not directly accessible to it e.g. because the devices are deployed behind a firewall or because the devices do not support the OMA-DM protocol. It also enables the management of devices in a Machine to Machine (M2M) ecosystem (e.g. fanning out DM commands from a DM Server to multiple end devices and aggregating responses from multiple end devices so that a consolidated response is sent back to the DM Server).

4.1 Version 1.0 Functionality

GwMO V1.0 covers:

- Transparent, Proxy and Protocol Adaptation modes of operation
- Device inventory
- Command fan-out and response aggregation
- Storage of configuration data and software image for subtending devices

The following issues are out of scope

- Device discovery mechanisms
- Management protocol adaptation rules

5. Document Listing for GwMO

This section is normative.

Doc Ref	Permanent Document Reference	Description
Requirement Document		
[GwMORD]	OMA-RD-GwMO-V1_0-20100831-C	Requirement Document for GwMO Enabler
Architecture Document		
[GwMOAD]	OMA-AD-GwMO-V1_0-20101102-C	Architecture Document for GwMO Enabler
Technical Specifications		
Supporting Files		

Table 1: Listing of Documents in GwMO Enabler

6. OMNA Considerations

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 GwMO - Client Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-<<ENABLER>>-C-001-<<M/O>>	<<ENABLER>> Client	

Table 2: ERDEF for GwMO Client-side Requirements

9. ERDEF for GwMO - Server Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-<<ENABLER>>-S-001-<<M/O>>	<<ENABLER>> Server	

Table 3: ERDEF for GwMO Server-side Requirements

Appendix A. Change History (Informative)

A.1 Approved Version History

Reference	Date	Description
n/a	n/a	No prior version

A.2 Draft/Candidate Version 1.0 History

Document Identifier	Date	Sections	Description
Draft Versions OMA-GwMO-V1_0	13 Jul 2010	N/A	Baseline as per OMA-DM-GwMO-2010-0022R01-INP_ERELED_Baseline
	21 Jul 2010	All	Editorial fixes and clean up
Candidate Version OMA-GwMO-V1_0	31 Aug 2010	N/A	Status changed to Candidate by TP TP ref # OMA-TP-2010-0380- INP_GwMO_V1_0_RD_for_Candidate_approval
Draft Version OMA-GwMO-V1_0	15 Oct 2010	5	List of documents updated to add the AD before its Candidate approval.
Candidate Version OMA-GwMO-V1_0	02 Nov 2010	N/A	Status changed to Candidate by TP TP ref # OMA-TP-2010-0443- INP_GwMO_V1_0_AD_for_Candidate_approval