



Enabler Release Definition for DiagMon Management Object

Candidate Version 1.0 – 10 Jun 2009

Open Mobile Alliance
OMA-ERELD-DiagMon-V1_0-20090610-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.

© 2009 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 DIAGMON.....8
- 6. OMNA CONSIDERATIONS9
- 7. CONFORMANCE REQUIREMENTS NOTATION DETAILS10
- 8. ERDEF FOR DIAGMON - CLIENT REQUIREMENTS11
- 9. ERDEF FOR DIAGMON - SERVER REQUIREMENTS12
- APPENDIX A. CHANGE HISTORY (INFORMATIVE).....13
 - A.1 APPROVED VERSION HISTORY13
 - A.2 DRAFT/CANDIDATE VERSION 1.0 HISTORY13

Tables

- Table 1: Listing of Documents in DiagMon Enabler8
- Table 2: ERDEF for DiagMon Client-side Requirements.....11
- Table 3: ERDEF for DiagMon Server-side Requirements.....12

1. Scope

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

2. References

2.1 Normative References

- [DiagMon-AD] “DiagMon Architecture”, Open Mobile Alliance™, OMA-AD-DiagMon-V1_0, URL: <http://www.openmobilealliance.org/>
- [DiagMon-DDF] “DiagMon DDF”, Open Mobile Alliance™, OMA-SUP-MO_DiagMon-V1_0, URL: <http://www.openmobilealliance.org/>
- [DiagMon-RD] “DiagMon Requirements”, Open Mobile Alliance™, OMA-RD-DiagMon-V1_0, URL: <http://www.openmobilealliance.org/>
- [DiagMon-TS] “DiagMon Technical Specification”, Open Mobile Alliance™, OMA-TS-DiagMon-V1_0, URL: <http://www.openmobilealliance.org/>
- [DiagMonTrapMO-TS] “DiagMonTrap MO Technical Specification”, Open Mobile Alliance™, OMA-TS-DiagMonTrapMO-V1_0, URL: <http://www.openmobilealliance.org/>
- [DiagMonTrapMO-DDF] “DiagMonTrapMO DDF”, Open Mobile Alliance™, OMA-SUP-MO_DiagMonTrapMO-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, URL: <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/>

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 fulfill 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.
Software Component	A Diagnostics resource utilized by the mobile Device software platform

3.3 Abbreviations

DiagMon	Diagnostics Management Object
ERDEF	Enabler Requirement Definition
ERELD	Enabler Release Definition
OMA	Open Mobile Alliance

4. Release Version Overview

The Diagnostics Management Object enables remote Diagnostics management within Device. This can be used for example to update antivirus software or browser plug-in etc.

Management operations defined for the purpose of Software Component management on the Device support delivery, download, installation, update, removal, activation & de-activation. In addition, retrieval of inventory of Software Components on the Device is also supported.

4.1 Version 1.0 Functionality

The Diagnostics Management Object (DiagMon) V1.0 Enabler [DiagMon-TS] supports the following functionality.

- 1) **Diagnostics Policies Management:** Support for specification and enforcement of policies related to the management of diagnostics features and data.
- 2) **Fault Reporting:** Enable the device to report faults to the network as the trouble is detected at the device.
- 3) **Performance Monitoring:** Enable the device to measure, collect and report key performance indicators (KPIs) data as seen by the device such as on a periodic basis.
- 4) **Device Interrogation:** Enable the network to query the device for additional diagnostics data in response to a fault
- 5) **Remote Diagnostics Procedure Invocation:** Enable management authorities to invoke specific diagnostics procedures embedded in the device to perform routine maintenance and diagnostics.
- 6) **Remote Device Repairing:** Enable management authorities to invoke specific repairing procedures based on the results of diagnosis procedures.

5. Document Listing for DiagMon

This section is normative.

Doc Ref	Permanent Document Reference	Description
Requirement Document		
[DiagMon_RD]	OMA-RD-DiagMon-V1_0-20070918-C	Requirement Document for DiagMon Enabler
Architecture Document		
[DiagMon_AD]	OMA-AD-DiagMon-V1_0-20090414-C	Architecture Document for DiagMon Enabler
Technical Specifications		
[DiagMon_TS]	OMA-TS-DiagMon-V1_0-20090610-C	Technical Specification for DiagMon Enabler
[DiagMonTrapMO TS]	OMA-TS-DiagMonTrapMO-V1_0-20090414-C	Technical Specification for the DiagMon Trap MO Enabler
Supporting Files		
[DiagMon_DDF]	OMA-SUP-MO_DiagMon-V1_0-20090414-C	DDF Document for DiagMon Framework Working file in DM_Managed Object directory: file: oma-sup-mo_diagmon-v1.0.ddf path: http://www.openmobilealliance.org/tech/omna/
[DiagMonTrapMO DDF]	OMA-SUP-MO_DiagMonTrapMO-V1_0-20090414-C	DDF Document for DiagMon Trap MO Working file in DM_Managed Object directory: file: oma-sup-mo_diagmontrapmo-v1.0.ddf path: http://www.openmobilealliance.org/tech/omna/

Table 1: Listing of Documents in DiagMon Enabler

6. OMNA Considerations

The OMNA portal needs to add and maintain the following MO into its registry:

MO Identifier	Description	Owner	Version	MO DDF	MO Spec
urn:oma:mo:oma-diagmon:1.0	Diagnostics and Monitoring MO	DM WG	1.0	OMA-SUP-MO_DiagMon-V1_0-20080422-D	OMA-TS-DiagMon-V1_0-20090303-D

The OMNA portal needs to add and maintain the following alert type into Alert Type registry:

Alert Root	Alert Code	Alert Type Description	Owner	Version	Spec	MO Identifier (Optional)
urn:oma:at:diagmon:1.0	OperationComplete	Used to claim that the alert message conveys the result of DiagMon operation	DM WG	1.0	OMA-TS-DiagMon-V1_0-20090303-D	urn:oma:mo:oma-diagmon:1.0
	TrapNotification	Used to claim that the alert message conveys the trap notification	DM WG	1.0	OMA-TS-DiagMonTrapMO-V1_0-20090303-D	urn:oma:mo:oma-diagmontrap:1.0

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 DiagMon – Client Requirements

This section is normative.

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

Table 2: ERDEF for DiagMon Client-side Requirements

9. ERDEF for DiagMon – Server Requirements

This section is normative.

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

Table 3: ERDEF for DiagMon 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-ERELED-DiagMon-V1_0	21 Oct 2008	All	Initial baseline draft
	06 Jan 2009	All	Final cleanup prior to Consistency Review Incorporated agreed CR: OMA-DM-Diag-2008-0072R01
	01 Feb 2009	6	Editorial changes
	04 Mar 2009	6, All	Incorporated agreed CRs: OMA-DM-Diag-2009-0017R01 Editorial changes: <ol style="list-style-type: none"> 1. Changed header & footer – document name 2. Updated document identifiers in this table (A.2) 3. Set document language to English 4. Fixed spelling errors 5. Set all fonts to Times New Roman
	18 Mar 2009	5	Document List updated
Candidate Versions OMA-ERELED-DiagMon-V1_0	14 Apr 2009	n/a	Status changed by TP OMA-TP-2009-0138- INP_DiagMon_V1_0_ERP_for_Candidate_Approval
Draft Versions OMA-ERELED-DiagMon-V1_0	03 Jun 2009	5	Document Listing Updated
Candidate Versions: OMA-ERELED-DiagMon-V1_0	10 Jun 2009	5	Status Changed by TP OMA-TP-2009-0268R02-INP_DiagMon_V1_0_ERP_for_Notification Document Listing Updated