

Reference Release Definition for LWM2M_DevCapMgmt

Approved Version 1.0.2 – 08 Mar 2017

Open Mobile Alliance OMA-RRELD-LWM2M_DevCapMgmt-V1_0_2-20170308-A

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 AllianceTM 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.

© 2017 Open Mobile Alliance All Rights Reserved.

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

Contents

| 1. | SCC | OPE | 4 |
|----|-------------------|--|--------|
| 2. | REF | FERENCES | 5 |
| 2 | 2.1 2.2 | NORMATIVE REFERENCES | 5 5 |
| 3. | TEF | RMINOLOGY AND CONVENTIONS | |
| 3 | 3.1 3.2 3.3 | CONVENTIONS DEFINITIONS ABBREVIATIONS | 6 |
| 4. | REI | LEASE VERSION OVERVIEW | 7 |
| 4 | l.1 | VERSION 1.0 FUNCTIONALITY | 7 |
| 5. | DO | CUMENT LISTING FOR LWM2M DEVCAPMGMT 1.0.2 | 8 |
| 6. | | INA CONSIDERATIONS | |
| 7. | API | I CONSIDERATIONS | 10 |
| AP | | DIX A. CHANGE HISTORY (INFORMATIVE) | 11 |
| A | A.1 | APPROVED VERSION HISTORY | 11 |
| F | igu | ires | |
| | of figures entr | | |
| T | abl | es | |
| Ta | ble 1: | Listing of Documents in LWM2M DEVCAPMGMT 1.0.2 | 8 |

1. Scope

The scope of this document is limited to the Reference Release Definition of LWM2M_DEVCAPMGMT according to OMA Release process and the Enabler Release specification baseline listed in section 5.

2. References

2.1 Normative References

[DEVCAPMGMT_TS] "Lightweight M2M – Device Capability management Object", Version 1.0, Open Mobile Alliance,

OMA-TS-LWM2M DevCapMgmt-V1_0, <u>URL:http://www.openmobilealliance.org/</u>

[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 2.9, Open Mobile AllianceTM,

OMA-ORG-Dictionary-V2_9, <u>URL:http://www.openmobilealliance.org/</u>

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.

3.2 Definitions

Minimum Functionality Description

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

Secription immunity part of the Endoter Release

Reference Release A set of specifications and/or white papers which form a formal deliverable of OMA. The release can be

referenced or otherwise used to support implementable enabler releases, but it cannot by itself be

implemented in products.

3.3 Abbreviations

LwM2M Lightweight Machine to Machine (refers to this OMA enabler)

OMA Open Mobile Alliance

OMNA Open Mobile Naming Authority

RRELD Reference Release Definition

Kindly consult [OMADICT] for more abbreviations used in this document.

4. Release Version Overview

The present Reference Release enables remote device capability management in M2M devices.

4.1 Version 1.0 Functionality

V1.0 of the specification covers:

- 1) Device Capability Enablement
- 2) Device Capability Disablement
- 3) Device attachement of removable hardware
- 4) Device detachement of removable hardware
- 5) Conditional notification when Device Capability State is modified

5. Document Listing for LWM2M DEVCAPMGMT 1.0.2

This section is normative.

| Doc Ref | Permanent Document Reference | Description | | | | | |
|-------------------------|--|---|--|--|--|--|--|
| Technical Specification | | | | | | | |
| [DEVCAPMGMT_TS] | OMA-TS-LWM2M_DevCapMgmt-V1_0_2- 20170308-A | Technical Sepcification for LWM2W DEVCAPMGMT | | | | | |
| Supporting Files | | | | | | | |
| [LWM2M_DevCapMgmt_XML] | OMA-SUP-XML_LWM2M_DevCapMgmt- V1_0-20170308-A | XML document for LightweightM2M Device Capability Management Object | | | | | |
| | | Working file in LWM2M_XML directory: | | | | | |
| | | File: LWM2M_DevCapMgmt-v1_0.xml | | | | | |
| | | Path: http://www.openmobilealliance.org/tech/profiles | | | | | |

Table 1: Listing of Documents in LWM2M DEVCAPMGMT 1.0.2

6. OMNA Considerations

The present Reference Release consists in a new LwM2M Object. This LwM2M Object will be registered with the OMNA LwM2M Object registry.

7. API Considerations

Not Applicable.

Appendix A. Change History

(Informative)

A.1 Approved Version History

| Reference | Date | Description |
|--|-------------|--|
| OMA-RRELD-LWM2M_DevCapMgmt-V1_0-20150512-A | 12 May 2015 | Status changed to Approved by TP TP Ref # OMA-TP-2015-0080- INP_LWM2M_DevCapMgmt_V1_0_RRP_for_final_Approval |
| OMA-RRELD-LWM2M_DevCapMgmt- V1_0_1-20151123-A | 23 Nov 2015 | Status changed to Approved by TP TP Ref # OMA-TP-2015-0202- INP_LWM2M_DevCapMgmt_V1_0_1_RRP_for_Notification |
| OMA-RRELD-LWM2M_DevCapMgmt-V1_0_2-20170308-A | 08 Mar 2017 | Status changed to Approved by TP TP Ref # OMA-TP-2017-0021R01- INP_LWM2M_DevCapMgmt_1.0.2_for_Final_Approval_Notification |