

Reference Release Definition for M2Minterface Approved Version 1.0 – 24 Mar 2015

Open Mobile Alliance OMA-RRELD-M2Minterface-V1_0-20150324-A

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1. Scope

The scope of this document is limited to the Enabler Release Definition of M2M interface according to OMA Release process and the Enabler Release specification baseline listed in section 5.

2. References

2.1 Normative References

[M2Mi_RD] "M2M interface Requirement Document", Version 1.0, Open Mobile Alliance, OMA-RD-M2Mi-V1_0,

URL:http://www.openmobilealliance.org/

[oneM2MRequirements] Reference oneM2M-TS-0002-Requirements-V0_6_2, <u>URL:http://www.onem2m.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

 $\begin{tabular}{ll} \textbf{[OMADICT]} & \textbf{``Dictionary for OMA Specifications'', Version x.y, Open Mobile Alliance} \\ \textbf{``Dictionary for OMA Specifications'', Version x.y, Open Mobile Alliance} \\ \textbf{``Dictionary for OMA Specifications'', Version x.y, Open Mobile Alliance} \\ \textbf{``Dictionary for OMA Specifications'', Version x.y, Open Mobile Alliance} \\ \textbf{``Dictionary for OMA Specifications'', Version x.y, Open Mobile Alliance} \\ \textbf{``Dictionary for OMA Specifications'', Version x.y, Open Mobile Alliance} \\ \textbf{``Dictionary for OMA Specifications'', Version x.y, Open Mobile Alliance} \\ \textbf{``Dictionary for OMA Specifications'', Version x.y, Open Mobile Alliance} \\ \textbf{``Dictionary for OMA Specifications'', Version x.y, Open Mobile Alliance} \\ \textbf{``Dictionary for OMA Specifications'', Version x.y, Open Mobile Alliance} \\ \textbf{``Dictionary for OMA Specifications'', Version x.y, Open Mobile Alliance} \\ \textbf{``Dictionary for OMA Specifications'', Open$

OMA-ORG-Dictionary-Vx_y, URL:http://www.openmobilealliance.org/

[oneM2M UseCases] Reference oneM2M-TR-0001-UseCase-V0_0_5,

<u>URL:http://member.onem2m.org/Application/documentapp/downloadLatestRevision/?docId=673</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.

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

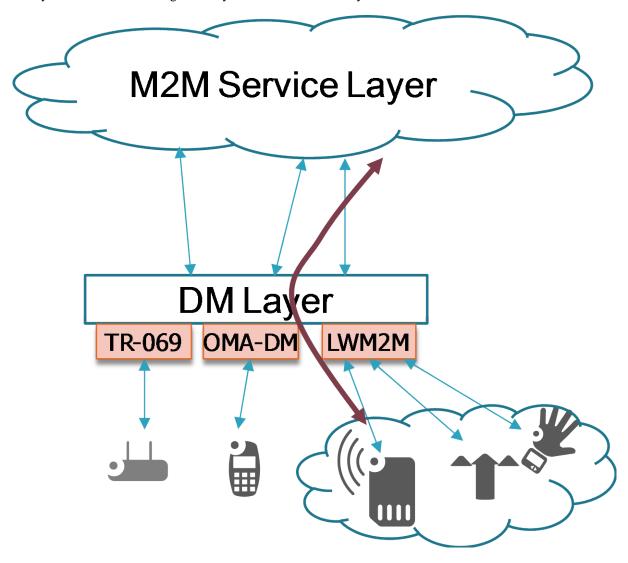
OMNA Open Mobile Naming Authority

RRELD Reference Release Definition

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

4. Release Version Overview

M2M Service layer is establishing practices which utilize device management functionality provided by the DM layer. In order to effectively use the device management functionality of the DM layer, an interface between the M2M Service layer and DM layer needs to be specified. M2M interface enabler provides needed requirements to engulf the overall needs across the boundary between Device Management layer and M2M Service Layer.



4.1 Version 1.0 Functionality

Version 1.0 of M2M interface RD provides the requirements basic functionalities interconnecting M2M service layer to Device Management Layer and covers the following

- Security
- Session Establishment
- Session Operations
- Events
- Resource Discovery

5. Document Listing for M2Minterface 1.0

This section is normative.

Doc Ref	Permanent Document Reference	Description					
Requirement Document							
[M2Mi_RD] OMA-RD-M2MInterface-V1_0-20150324-A Requirement Document for M2M interface		Requirement Document for M2M interface Enabler					

Table 1: Listing of Documents in M2M interface Enabler

6. OMNA Considerations

None

7. API Considerations

Not Applicable for V1.0 release of M2M interface enabler.

Appendix A. Change History

(Informative)

A.1 Approved Version History

Reference	Date	Description
OMA-RRELD-M2Minterface-V1_0- 20150324-A	24 Mar 2015	Status changed to Approved by TP TP Ref # OMA-TP-2015-0072- INP_Management_Interface_for_M2M_V1_0_RRP_for_final_Approval

Appendix B. oneM2M use cases

Industry Segment	oneM2M Use Cases							
Agriculture								
Energy	Wide area Energy related measurement /control system for advanced transmission and distribution automation	Analytics for oneM2M	Smart Meter Reading	Environmental Monitoring for Hydro-Power Generation using Satellite M2M	Oil and Gas Pipeline Cellular /Satellite Gateway			
Enterprise	Smart building							
Finance								
Healthcare	M2M Healthcare Gateway	Wellness services	Secure remote patient care and monitoring					
Industrial								
Public Services	Street Light Automation	Devices, Virtual devices and Things	Car/Bicycle Sharing Services	Smart parking	Information Delivery service in the devastated area			
Residential	Home Energy Management	Home Energy Management System	Plug-In Electrical Charging Vehicles and power feed in home scenario	Real-time Audio/Video Communication	Event Triggered Task Execution	Semantic Home Control	Semantic Device Plug and Play	
Retail								
Transportation	Vehicle Diagnostic & Maintenance Report	Remote Maintenance services	Neighbourhood Alerting on Traffic Accident	Fleet management service using Digital Tachograph				
Other	Extending the M2M Access Network using Satellites	M2M data traffic management by underlying network operator	Optimizing connectivity management parameters with mobile networks	Optimizing mobility management parameters with mobile networks	Sleepy	Collection of M2M system data	Leveraging Broadcasting/ Multicasting Capability of Underlying Networks	Service Provisioning for Equipment with Built-in Device