



Enabler Release Definition for RESTful Network API for Twinning Devices

Candidate Version 1.0 – 27 May 2016

Open Mobile Alliance
OMA-ERELD-REST_NetAPI_Twinning-V1_0-20160527-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.

© 2016 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. SCOPE.....	4
2. REFERENCES	5
2.1 NORMATIVE REFERENCES.....	5
2.2 INFORMATIVE REFERENCES.....	5
3. TERMINOLOGY AND CONVENTIONS.....	6
3.1 CONVENTIONS.....	6
3.2 DEFINITIONS.....	6
3.3 ABBREVIATIONS.....	6
4. RELEASE VERSION OVERVIEW	7
4.1 VERSION 1.0 FUNCTIONALITY	7
5. DOCUMENT LISTING FOR RESTFUL NETWORK API FOR TWINNING DEVICES V1.0	8
6. OMNA CONSIDERATIONS	9
7. API CONSIDERATIONS	10
8. CONFORMANCE REQUIREMENTS NOTATION DETAILS	11
9. ERDEF FOR REST_TWANNING.....	12
APPENDIX A. CHANGE HISTORY (INFORMATIVE).....	13
A.1 APPROVED VERSION HISTORY	13
A.2 DRAFT/CANDIDATE VERSION 1.0 HISTORY	13

Tables

Table 1: Listing of Documents in the RESTful Network API for Twinning V1.0 Enabler	8
Table 2: OMNA Namespaces.....	9
Table 3: OMNA Registered PUSH AppID	9
Table 4: ERDEF for the RESTful Network API for Twinning Devices V 1.0.....	12

1. Scope

The scope of this document is limited to the Enabler Release Definition of the RESTful Network API for Twinning Devices 1.0 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](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 2.9, Open Mobile Alliance™,
OMA-ORG-Dictionary-V2_9, [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 section 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.

3.3 Abbreviations

API	Application Programming Interface
ERDEF	Enabler Requirement Definition
ERELED	Enabler Release Definition
OMA	Open Mobile Alliance
OMNA	Open Mobile Naming Authority
REST	Representational State Transfer
XML	Extensible Markup Language

4. Release Version Overview

The scope of this enabler release is to specify a RESTful Network API for Twinning Devices 1.0 using an HTTP protocol binding.

4.1 Version 1.0 Functionality

The RESTful Network API for Twinning Devices 1.0 defines REST protocol bindings.

5. Document Listing for RESTful Network API for Twinning Devices V1.0

This section is normative.

As the RESTful Network API for Twinning Devices 1.0 is a so-called Fast Track enabler release, no separate Architecture Document deliverable is produced.

Doc Ref	Permanent Document Reference	Description
Requirements Document		
[RD-REST_NetAPI_Twinning]	OMA-RD-REST_NetAPI_Twinning -V1_0-20151215-C	Requirements Document for the RESTful Network API for Twinning Devices
Technical Specification		
[REST_NetAPI_Twinning]	OMA-TS-REST_NetAPI_Twinning-V1_0-20151215-C	RESTful Network API for Twinning Devices
Supporting File		
[SUP-XSD_rest_twinning]	OMA-SUP-XSD_rest_netapi_twinning-V1_0-20160527-C	XML schema for the RESTful Network API for Twinning Devices Working file in Schema directory: file: rest_netapi_twinning-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles/

Table 1: Listing of Documents in the RESTful Network API for Twinning V1.0 Enabler

6. OMNA Considerations

The RESTful Network API for Twinning Devices 1.0 enabler introduces the following namespaces.

Note that in order to maintain compatibility between minor versions of the same major version, only the major version is reflected in the namespace identifier. Further note that subsequent minor versions of the same XML schema (e.g. 1.1) will be registered against the same namespace identifier.

Description	Registered URN	Schema Links
Twinning	urn:oma:xml:rest:netapi:twinning:1	http://www.openmobilealliance.org/tech/profiles/rest_netapi_twinning-v1_0.xsd

Table 2: OMNA Namespaces

Exception codes as defined in section 7 of [REST_NetAPI_Twinning] are requested to be added to the RESTful Network API Exception Codes Registry, if applicable.

The RESTful Network API for Twinning Devices 1.0 enabler introduces the following PUSH Application identifier for the Twinning Application client which receives messaging events through OMA PUSH Notification channel.

Number	Registered URN	Description
0x17	x-oma-application:twinning.ua	This ID is used for messages to Twinning clients as defined in the OMA RESTful Network API for Twinning Devices.

Table 3: OMNA Registered PUSH AppID

7. API Considerations

API Information				
API Name	Technical Specification	API Description	API Category	Protocol Binding
Twinning	OMA-TS-REST_NetAPI_Twinning-V1_0	This API provides the ability for an “authorized” application (on behalf of the user) to Twin a secondary device to a primary device and as a result share the identity of a primary device. The Twinning API enables the twinned device receive calls/messages destined to the primary device.	Network API	RESTful http
Previous Release				
Technical Specifications			Publication Release	
None			n/a	
Supporting Material				
Name			Publication Release	
OMA-SUP-XSD_rest_netapi_twinning-V1_0			This Release	
OMA-TS-REST_NetAPI_Common-V1_0			OMA-RRP-REST_NetAPI_Common-V1_0	
OMA-SUP-XSD_rest_netapi_common-V1_0			OMA-RRP-REST_NetAPI_Common-V1_0	
Related Material				
Name			Publication Release	
OMA-WP-Guidelines_for_RESTful_Network_APIs			OMA-RRP-Guidelines_for_RESTful_Network_APIs	
Profile Information				
Name			Publication Release	
n/a			n/a	

8. 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.

9. ERDEF for REST_Twinning

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-REST-TWINNING-S-001-M	RESTful Network API for Twinning Devices 1.0 [REST_NetAPI_Twinning]	REST-TWINNING-SUPPORT-S-001-M

Table 4: ERDEF for the RESTful Network API for Twinning Devices V 1.0

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-EREELD- REST_NetAPI_Twinning-V1_0	22 Oct 2014	All	Initial draft baseline document.
	11 Feb 2015	5	Updated document listing prior to RD formal review.
	18 Mar 2015	5	Updated document listing prior to RD formal review closure.
Candidate Version OMA-EREELD- REST_NetAPI_Twinning-V1_0	07 Apr 2015	All	Status changed to Candidate by TP TP Ref # OMA-TP-2015-0074- INP_TWIN_V1_0_RD_for_Candidate_approval
Draft Versions OMA-EREELD- REST_NetAPI_Twinning-V1_0	14 Sep 2015	5	Editorial update of permanent document references in section 5
	03 Dec 2015	5	Editorial update of permanent document references in section 5
Candidate Version OMA-EREELD- REST_NetAPI_Twinning-V1_0	15 Dec 2015	All	Status changed to Candidate by TP TP Ref # OMA-TP-2015-0216- INP_TWIN_V1_0_ERP_and_ETR_for_Candidate_approval
Draft Versions OMA-EREELD- REST_NetAPI_Twinning-V1_0	13 May 2016	1, 4, 5, 6, 9	Incorporated CR: OMA-ARC-TWIN-2015-0078-CR_CONR_fixing_EREELD
	27 May 2016	5	Editorial update of permanent document references in section 5
Candidate Version OMA-EREELD- REST_NetAPI_Twinning-V1_0	27 May 2016	All	Status changed to Candidate by TP TP Ref # OMA-TP-2016-0074-INP_TWIN_V1_0_ERP_for_Notification