



Device Web APIs for 3D Printer - Enabler Release Definition

Candidate Version 1.0 – 14 Nov 2017

Open Mobile Alliance
OMA-ERELD-DWAPI_3DP-V1_0-20171114-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.

© 2017 Open Mobile Alliance All Rights Reserved.

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

Contents

- 1. SCOPE.....4
- 2. REFERENCES5
 - 2.1 NORMATIVE REFERENCES.....5
 - 2.2 INFORMATIVE REFERENCES.....5
- 3. TERMINOLOGY AND CONVENTIONS6
 - 3.1 CONVENTIONS6
 - 3.2 DEFINITIONS.....6
 - 3.3 ABBREVIATIONS6
- 4. RELEASE VERSION OVERVIEW7
 - 4.1 VERSION 1.0 FUNCTIONALITY7
- 5. DOCUMENT LISTING FOR DWAPI-3DP 1.08
- 6. OMNA CONSIDERATIONS9
- 7. API CONSIDERATIONS10
- 8. CONFORMANCE REQUIREMENTS NOTATION DETAILS11
- APPENDIX A. CHANGE HISTORY (INFORMATIVE).....12
 - A.1 APPROVED VERSION HISTORY12
 - A.2 DRAFT/CANDIDATE VERSION 1.0 HISTORY12

Figures

No table of figures entries found.

Tables

- Table 1: Listing of Documents in DWAPI-3DP Enabler.....8

1. Scope

The scope of this document is limited to the Enabler Release Definition of Device Web API for 3DP, DWAPI-3DP 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 sections 7 and 8 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

3DP	3D Printer
DWAPI	Device Web API
ERDEF	Enabler Requirement Definition
ERELD	Enabler Release Definition
OMA	Open Mobile Alliance
OMNA	Open Mobile Naming Authority

4. Release Version Overview

4.1 Version 1.0 Functionality

DWAPI-3DP 1.0 focuses on:

- the functions of DWAPI-3DP enabler is to defined Extension Plug-Ins that can expose data from 3D printer to web application through the GotAPI Server

The scope of OMA Device WebAPI for 3D Printer enabler will include the functionality:

- Requirements, architecture and specifications for web-based APIs to expose services available from 3D printer and internal enablers through Extension Plug-Ins to applications
- The web-based APIs that will work in the framework that GotAPI (Generic Open Terminal API Framework) defines, where the web-based APIs are implemented in the Extension Plug-Ins and exposing the services from the 3D printers or internal enablers that are connected with the Extension Plug-Ins.
- The framework provided by the combination of GotAPI and Device WebAPI for 3D Printer to enable applications to work through standardized APIs with 3D printers or internal enablers, as GotAPI itself does not standardize the APIs to be implemented in the Extension Plug-Ins.

5. Document Listing for DWAPI-3DP 1.0

This section is normative.

Doc Ref	Permanent Document Reference	Description
Enabler Release		
[DWAPI-3DP_ER]	OMA-ER-Device_WebAPIs_3DP-V1_0-20171114-C	Enabler Requirements and Archecticure
Technical Specifications		
[DWAPI-3DP_TS]	OMA-TS-3D_Printer_APIs-V1_0-20171114-C	Enabler Technical Specification of 3D Printer

Table 1: Listing of Documents in DWAPI-3DP Enabler

6. OMNA Considerations

None

7. API Considerations

None.

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.

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 Version OMA-ERELD-DWAPI_3DP-V1_0	30 Oct 2017	All	First draft
Candidate Version OMA-ERELD-DWAPI_3DP-V1_0	14 Nov 2017	n/a	Status changed to Candidate by TP TP Ref # OMA-TP-2017-0046R01- INP_DWAPI_3DP_1.0_for_Candidate_Approval