

## **Device Web APIs for 3D Printer - Enabler Release Definition**

Approved Version 1.0 – 21 Oct 2018

Open Mobile Alliance OMA-ERELD-DWAPI\_3DP-V1\_0-20181021-A

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## 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

#### **Normative References** 2.1

[RFC2119] "Key words for use in RFCs to Indicate Requirement Levels", S. Bradner, March 1997,

URL:http://www.ietf.org/rfc/rfc2119.txt

"SCR Rules and Procedures", Open Mobile Alliance  $^{TM}$ , OMA-ORG-SCR\_Rules\_and\_Procedures,  $\underline{URL:http://www.openmobilealliance.org/}$ [SCRRULES]

#### **Informative References** 2.2

[OMADICT] "Dictionary for OMA Specifications", Version 2.9, Open Mobile Alliance<sup>TM</sup>,

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.

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 throught 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_0-20181021-A	Enabler Requirements and Archecticure		
Technical Specifications				
[DWAPI- 3DP_TS]	OMA-TS-3D_Printer_APIs-V1_0-20181021-A	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
OMA-ERELD-DWAPI_3DP-V1_0- 20181021-A	21 Oct 2018	Status changed to Approved by CD Doc Ref # OMA-CD-DWAPI-2018-0001- INP_DWAPI_3DP_V1_0_ERP_for_final_Approval