

Enabler Release Definition for Unified Cloud Disk Enabler (UCD) Candidate Version 1.0 – 16 Dec 2014

Open Mobile Alliance OMA-ERELD-UCD-V1_0-20141216-C Use of this document is subject to all of the terms and conditions of the Use Agreement located at <u>http://www.openmobilealliance.org/UseAgreement.html</u>.

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.

© 2014 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.	SCO	OPE	.4
2.	RE	FERENCES	
	2.1	NORMATIVE REFERENCES	.5
	2.2	INFORMATIVE REFERENCES	
3.	TEI	RMINOLOGY AND CONVENTIONS	
	3.1	CONVENTIONS	
	3.2	DEFINITIONS	.6
	3.3	ABBREVIATIONS	
4.	RE	LEASE VERSION OVERVIEW	
	4.1	VERSION 1.0 FUNCTIONALITY	.7
5.		CUMENT LISTING FOR UCD 1.0	
6.	OM	INA CONSIDERATIONS	.9
7.		NFORMANCE REQUIREMENTS NOTATION DETAILS1	
8.	ERI	DEF FOR UCD 1.0 – CLIENT REQUIREMENTS	11
9.	ERI	DEF FOR UCD 1.0 – SERVER REQUIREMENTS	12
A	PPENI	DIX A. CHANGE HISTORY (INFORMATIVE)1	13
	A.1	APPROVED VERSION HISTORY	13
	A.2	DRAFT/CANDIDATE VERSION 1.0 HISTORY	13

Tables

Table 1: Listing of Documents in UCD 1.0 Enabler	8
Table 2: OMNA Namespaces	9
Table 3: ERDEF for UCD 1.0 Client-side Requirements	11
Table 4: ERDEF for UCD 1.0 Server-side Requirements	12

1. Scope

The scope of this document is limited to the Enabler Release Definition of Unified Cloud Disk (UCD) 1.0 according to OMA Release process and the Enabler Release specification baseline listed in section 5.

2.1 Normative References

[REST_NetAPI_UCD]"RESTful Network API for Unified Cloud Disk", Open Mobile AllianceTM, OMA-TS-
REST_NetAPI_UCD-V1_0, <u>URL:http://www.openmobilealliance.org/</u>[RFC2119]"Key words for use in RFCs to Indicate Requirement Levels", S. Bradner, March 1997,
<u>URL:http://www.ietf.org/rfc/rfc2119.txt</u>[SCRRULES]"SCR Rules and Procedures", Open Mobile AllianceTM, OMA-ORG-SCR_Rules_and_Procedures,
<u>URL:http://www.openmobilealliance.org/</u>[UCD-ER]"Unified Cloud Disk Enabler", Open Mobile AllianceTM, OMA-ER-UCD-V1_0,
<u>URL:http://www.openmobilealliance.org/</u>

2.2 Informative References

[OMADICT] "Dictionary for OMA Specifications", Version 2.9, Open Mobile Alliance™, 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 8 and 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
ER	Enabler Release
ERDEF	Enabler Requirement Definition
ERELD	Enabler Release Definition
OMA	Open Mobile Alliance
OMNA	Open Mobile Naming Authority
SCR	Static Conformance Requirements
SSO	Single Sign-On
UCD	Unified Cloud Disk
URN	Uniform Resource Name

4. Release Version Overview

This Enabler Release (ER) document is a combined document of requirements, architecture and technical specification for Unified Cloud Disk (UCD) Enabler.

The UCD Enabler provides unified cloud storage system in mobile cloud computing environment.

In particular, the user can access the cloud storage services of a specific UCD compliant SP or the cloud storage services of multiple UCD compliant SPs using SSO mechanism.

The user can also access the external cloud storage services of non-UCD compliant SPs through the gateway functionality of the UCD Server.

Furthermore, the UCD Enabler provides standard storage-as-a-service APIs for UCD compliant applications to access the UCD service.

4.1 Version 1.0 Functionality

The version 1.0 of the UCD Enabler defines an overall framework that enables Unified Cloud Disk services.

The core functionalities exposed by the UCD Enabler include:

- User account management including identity federation/defederation and SSO login and logout
- Access files including file/folder and file/folder attributes operations
- Search
- Recycle bin function
- Security and privacy aspects
- A set of network APIs to allow UCD compliant applications to access UCD cloud services, as well as the authorization framework to control access to information through these APIs.

5. Document Listing for UCD 1.0

This section is normative.

Doc Ref Permanent Document Reference		Description		
Enabler Release				
		Requirements, architecture and technical specification of the UCD enabler.		
Technical Specification	n			
[TS-OMA-TS-REST_NetAPI_UCD-V1_0-REST_NetAPI_UCD]20141216-C		RESTful Network API for Unidied Cloud Disk		
Supporting File				
[SUP-XSD_rest_ucd]	OMA-SUP-XSD_rest_netapi_ucd-V1_0- 20141216-C	XML schema for the RESTful Network API for Unified Cloud Disk Working file in Schema directory: file: rest_netapi_ucd-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles/		

Table 1: Listing of Documents in UCD 1.0 Enabler

6. OMNA Considerations

The RESTful Network API for Undified Cloud Disk 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
Unified Cloud Disk Restful network API	urn:oma:xml:rest:netapi: ucd:1	http://www.openmobilealliance.org/tech/profiles/rest_netapi_ucd-v1_0.xsd

Table 2: OMNA Namespaces

7. 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.

8. ERDEF for UCD 1.0 – Client Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-UCD-C-001-M	UCD Client	

 Table 3: ERDEF for UCD 1.0 Client-side Requirements

9. ERDEF for UCD 1.0 – Server Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-UCD-S-001-M	UCD Server	

 Table 4: ERDEF for UCD 1.0 Server-side Requirements

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	02 Jul 2014	All	Initial draft baseline document.
OMA-ERELD-UCD-V1_0	08 Jul 2014	5	Update the document list prior to Consistency Review
	10 Sep 2014	All	OMA-CD-UCD-2014-0081R01-CR_ERELD_ZTE
	17 Nov 2014	All	OMA-CD-UCD-2014-0107R01-CR_ERELD
	02 Dec 2014	5	Editorial update of permanent document references in section 5
Candidate Version	16 Dec 2014	All	Status changed to Candidate by TP
OMA-ERELD-UCD-V1_0			TP Ref # OMA-TP-2014-0277-
			INP_UCD_V1_0_ERP_and_ETR_for_Candidate_Approval