Enabler Release Definition for XML Document Management

Candidate Version 2.0 – 24 Jul 2007

Open Mobile Alliance

OMA-ERELD-XDM-V2_0-20070724-C

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1. Scope

The scope of this document is limited to the Enabler Release Definition of the XML Document Management version 2.0 enabler according to OMA Release process and the Enabler Release specification baseline listed in section 5.

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2. References

2.1 Normative References

[XDM_ Group] "Shared Group XDM Specification", Version 1.0, Open Mobile Alliance™, OMA-TS-XDM_Shared_Group-V1_0, URL: http://www.openmobilealliance.org/

[XDM_ List] "Shared List XDM Specification ", Version 2.0, Open Mobile Alliance™, OMA-TS-XDM_Shared-V2_0, URL: http://www.openmobilealliance.org/

[XDM_ Policy] "Shared Policy XDM Specification", Version 1.0, Open Mobile Alliance™, OMA-TS-XDM_Shared_Policy-V1_0, URL: http://www.openmobilealliance.org/

[XDM_ Profile] "Shared Profile XDM Specification", Version 1.0, Open Mobile Alliance™, OMA-TS-XDM_Shared_Profile-V1_0, URL: http://www.openmobilealliance.org/

[SCRRULES] "SCR Rules and Procedures", Version 1.0, Open Mobile Alliance™, OMA-ORG-SCR_Rules_and_Procedures-V1_0, URL: http://www.openmobilealliance.org/

[RFC2119] IETF RFC 2119 "Key words for use in RFCs to Indicate Requirement Levels", S. Bradner, March 1997, URL:http://www.ietf.org/rfc/rfc2119.txt

[RFC2234] IETF RFC 2234 "Augmented BNF for Syntax Specifications: ABNF". D. Crocker, Ed., P. Overell. November 1997, URL;http://www.ietf.org/rfc/rfc2234.txt

[RFC4825] IETF RFC 4825 "The Extensible Markup Language (XML) Configuration Access protocol (XCAP)", J. Rosenberg, May 2007, URL: http://www.ietf.org/rfc/rfc4825.txt

[XDM_RD] "XLM Document Management Requirements" Version 2.0, Open Mobile Alliance™, OMA-RD-XDM-V2_0, URL:http://www.openmobilealliance.org/

[XDM_MO] "OMA Management Object for XML Document Management", Version 2.0, Open Mobile Alliance™, OMA-TS-XDM_MO-V2_0, URL:http://www.openmobilealliance.org/

[XDM_Core] "XML Document Management (XDM) Specification" Version 2.0, Open Mobile Alliance™, OMA-TS-XDM_Core-V2_0, URL:http://www.openmobilealliance.org/

[XSD_appusage] "XML Schema Definition : XDM Resource List Elements – appusage", Version 1.0, Open Mobile Alliance™, OMA-SUP-XSD_xdm_rsrclist_appusage-V1_0, URL : http://www.openmobilealliance.org/

[XSD_commPol] "XML Schema Definition : XDM – Common Policy", Version 1.0.1, Open Mobile Alliance™, OMA-SUP-XSD_xdm_commonPolicy-V1_0_1, URL: http://www.openmobilealliance.org/

[XSD_ext] "XML Schema Definition : XDM – XDM2 Extensions", Version 1.0, Open Mobile Alliance™, OMA-SUP-XSD_xdm_extensions-V1_0, URL: http://www.openmobilealliance.org/

[XSD_userProf] "XML Schema Definition : XDM – User Profile", Version 1.0, Open Mobile Alliance™, OMA-SUP-XSD_xdm_userProfile-V1_0, URL: http://www.openmobilealliance.org/

[XSD_search] "XML Schema Definition : XDM – Search", Version 1.0, Open Mobile Alliance™, OMA-SUP-XSD_xdm_search-V1_0, URL: http://www.openmobilealliance.org/

[XSD_uriusage] "XML Schema Definition :XDM Resource List Elements – uriusage", Version 1.0, Open Mobile Alliance™, OMA-SUP-XSD_xdm_rsrclist_uriusage-V1_0, URL: http://www.openmobilealliance.org/

[XSD_xcapDir] "XML Schema Definition : XDM – XCAP Directory", Version 1.0.1, Open Mobile Alliance™, OMA-SUP-XSD_xdm_xcapDirectory-V1_0_1, URL: http://www.openmobilealliance.org/

[XSD_xcapErr] "XML Schema Definition : XDM – XCAP Error", Version 1.0, Open Mobile Alliance™, OMA-SUP-XSD_xdm_xcapError-V1_0, URL: http://www.openmobilealliance.org/

[XDM_AC] "XDM Application Characteristics file of XDM V2.0", Version 1.0, Open Mobile Alliance™, OMA-

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SUP-AC_ap0007_xdm-v1_0, URL: http://www.openmobilealliance.org

2.2 Informative References

[PoC_XDM] "PoC XDM Specification", Version 1.0.1, Open Mobile Alliance™, OMA-TS-XDM_PoC-V1_0_1, URL:http://www.openmobilealliance.org/

[IM_XDM] "IM XDM Specification", Draft Version 1.0, Open Mobile Alliance™, OMA-TS-XDM_IM-V1_0, URL:http://www.openmobilealliance.org/

[RLS_XDM] "Resource List Service (RLS) XDM Specification", Version 1.0.1, Open Mobile Alliance™, OMA-TS-Presence_SIMPLE_RLS_XDM-V1_0_1, URL: http://www.openmobilealliance.org/

[Presence_XDM] "Presence XML Document Management Specification", Version 1.0.1, Open Mobile Alliance™, OMA-TS-Presence_SIMPLE_XDM-V1_0_1, URL: http://www.openmobilealliance.org/

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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”, are normative, unless they are explicitly indicated to be informative.

The formal notation convention used in sections 7, 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.
Application Usage	Detailed information on the interaction of an application with an XCAP server. (Source: [RFC4825])
XCAP Server	An HTTP server that understands how to follow the naming and validation constraints defined in this specification. (Source: [RFC4825])

3.3 Abbreviations

ERDEF	Enabler Requirement Definition
ERELD	Enabler Release Definition
IETF	Internet Engineering Task Force
IM	Instant Messaging
OMA	Open Mobile Alliance
XCAP	XML Configuration Access Protocol
XDM	XML Document Management
XML	Extensible Markup Language
URI	Uniform Resource Identifier
UE	User Equipment
AS	Application Server

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4. Release Version Overview

4.1 Version 1.0 Functionality

The XML Document Management (XDM) enabler defines a common mechanism that makes user-specific service-related information accessible to the service enablers that need it. XDM specifies how such information is represented in well-structured XML documents, as well as the common protocol for access and manipulation (e.g. created, changed, deleted, etc.) of such XML documents.

The XDM Specification [XDM_Core] defines the features of the XDM enabler, which include the following:

- The common protocol, XML Configuration Access Protocol (XCAP) [RFC4825], by which Principals can store and manipulate their service-related data, stored in the network as XML documents.
- The SIP subscription/notification mechanism by which Principals can be notified of changes to such documents.

Documents accessed and manipulated via XCAP are stored in logical repositories in the network, called XML Document Management Servers (XDMS). Each repository may be associated with a functional entity which uses its data to perform its functions.

Each XML document stored in an XDMS is described as an Application Usage, which enables applications to use the document via XCAP. The XDM enabler describes Application Usages which can be reused by multiple enablers and are stored in logical entities called Shared XDMSs. The documents defined by the XDM V1.0 enabler are as follows:

- URI List and Group Usage List documents stored in the Shared XDMS.

4.2 Version 2.0 Functionality

The XDM V2.0 enabler defines new functionality that extends XDM to support the OMA SIMPLE Instant Messaging (IM) V1.0 and Push-to-talk over Cellular (PoC) V2.0 enablers.

To accommodate the needs of these enablers, the following functionality is added in XDM V2.0:

- Search for information in documents stored in an XDMS;
- Network to Network Interface to enable search and retrieval of information across multiple domains.

XDM V2.0 inherits the Shared XDMS from XDM V1.0, but renames it as the Shared List XDMS [XDM_List] to accommodate several new documents that are stored in separate Shared XDMS logical entities:

- Group document stored in the Shared Group XDMS [XDM_Group];
- User Access Policy document stored in the Shared Policy XDMS [XDM_Policy]; and
- User Profile document stored in the Shared Profile XDMS [XDM_Profile].

The Group and User Access Policy document structures are based on those of the PoC Group and PoC User Access Policy documents [PoC_XDM], respectively. The XDM 2.0 enabler defines how to handle backwards compatibility with the PoC V1.0 enabler when the Shared Group XDMS and Shared Policy XDMS are introduced in the network.

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5. Document Listing for XDM

This section is normative.

Doc Ref	Permanent Document Reference	Description
Requirement Document		
[XDM_RD]	OMA-RD-XDM-V2_0-20070724-C	Requirement Document for XDM Enabler
Architecture Document		
[XDM_AD]	OMA-AD-XDM-V2_0-20070724-C	Architecture Document for XDM Enabler
Technical Specifications		
[XDM_Core]	OMA-TS-XDM_Core-V2_0-20070724-C	Defines common protocols, data access conventions, common application usages, and the functional entities that are needed to provide XDM services to other enablers.
[XDM_MO]	OMA-TS-XDM_MO-V2_0-20070724-C	Defines the OMA XDM Management Object (MO).
[XDM_ Group]	OMA-TS-XDM_Shared_Group-V1_0-20070724-C	Defines the data format and Application Usage for the Group document.
[XDM_ List]	OMA-TS-XDM_Shared_List-V2_0-20070724-C	Defines the data format and Application Usage for the URI List document and the Group Usage List document.
[XDM_ Policy]	OMA-TS-XDM_Shared_Policy-V1_0-20070724-C	Defines the data format and Application Usage for the User Access Policy document.
[XDM_ Profile]	OMA-TS-XDM_Shared_Profile-V1_0-20070724-C	Defines the data format and Application Usage for the User Profile document.
Supporting Files		
[XSD_ext]	OMA-SUP-XSD_xdm_extensions-V1_0-20070724-C	XML schema for XDM V2.0 extensions Working file in schema directory: file: xdm_extensions-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles/
[XSD_search]	OMA-SUP-XSD_xdm_search-V1_0-20070724-C	XML Schema for Search document Working file in schema directory: file: xdm_search-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles/
[XSD_userProf]	OMA-SUP-XSD_xdm_userProfile-V1_0-20070724-C	XML Schema for User Profile document Working file in schema directory: file: xdm_userProfile-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles/
[XSD_commPol]	OMA-SUP-XSD_xdm_CommonPolicy-V1_0_1-20061128-A	XML Schema for OMA Common Policy document Working file in schema directory: file: xdm_CommonPolicy-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles/
[XSD_appusage]	OMA-SUP-XSD_xdm_rsrclst_appusage-V1_0-20060612-A	XML Schema for Resource List extension – appusages element Working file in schema directory: file: xdm_rsrclst_appusage-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles/
[XSD_uriusage]	OMA-SUP-	XML Schema for Resource List extension – uriusages element

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	XSD_xdm_rsrclst_uriusage-V1_0-20060612-A	Working file in schema directory: file: xdm_rsrclst_uriusage-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles/
[XSD_xcapDir]	OMA-SUP-XSD_xdm_xcapDirectory-V1_0_1-20061128-A	XML Schema for XCAP Directory document Working file in schema directory: file: xdm_xcapDirectory-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles/
[XSD_xcapErr]	OMA-SUP-XSD_xdm_xcapError-V1_0-20060612-A	XML Schema for XCAP Error extensions Working file in schema directory: file: xdm_xcapDirectory-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles/
[XDM_AC]	OMA-SUP-AC_ap0007_xdm-V1_0-20070724-C	Description of the Application Characteristic for XDM. This aligns with the provisioning spec. Working file in Application Characteristics directory: file: ac_ap0003_xdm-v2_0.txt path: http://www.openmobilealliance.org/tech/omna/dm-ac/

Table 1: Listing of documents in XDM Enabler

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6. 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.

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7. ERDEF for XDM - Client Requirements

This section is normative.

Item	Feature / Application		Requirement
OMA-ERDEF-XDM-C-001-M	XCAP protocol, common XCAP application usages and manipulation of shared URI Lists		XDMSPEC: MCF AND Shared_XDM: MCF

Table 2: ERDEF for XDM Client-side Requirements

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8. ERDEF for XDM - Server Requirements

This section is normative.

Item	Feature / Application		Requirement
OMA-ERDEF-XDM-S-003-M	Shared Group XDMS functions		Shared_Group_XDM: MSF
OMA-ERDEF-XDM-S-004-M	Shared List XDMS functions		Shared_List_XDM: MSF
OMA-ERDEF-XDM-S-005-M	Shared Policy XDMS functions		Shared_Policy_XDM: MSF
OMA-ERDEF-XDM-S-006-M	Shared Profile XDMS functions		Shared_Profile_XDM: MSF

Table 3: ERDEF for XDM Server-side Requirements

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9. ERDEF for XDM – Aggregation Proxy Requirements

This section is normative.

Item	Feature / Application		Requirement
OMA-ERDEF-XDM-S-001-M	XCAP protocol and common XCAP Application Usages		XDMSPEC: MSF

Table 4: ERDEF for Aggregation Proxy Requirements

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Appendix A. Change History (Informative)

A.1 Approved Version History

Reference	Date	Description
n/a	n/a	No prior version –or- No previous version within OMA

A.2 Draft/Candidate Version 2.0 History

Document Identifier	Date	Sections	Description
Draft Versions OMA-ERELD_XDM-V2_0	20 Dec 2006	n/a	First Draft
	25 Apr 2007	2.1, 4, 5, 6, 7.2, 10	Incorporated CRs: OMA-PAG-2006-0203 OMA-PAG-2006-0244R01 OMA-PAG-2006-0245 OMA-PAG-2006-0246R01 OMA-PAG-2006-0248 OMA-PAG-2006-0249 OMA-PAG-2006-0267
	14 Jun 2007	all	Incorporated CRs: OMA-PAG-2007-0311R02 OMA-PAG-2007-0335R03
	15 Jun 2007	5	Editorial date correction
	16 Jun 2007	5	Editorial date correction
	18 Jun 2007	5	Editorial date correction
	01 Jul 2007	5	Editorial date correction
Candidate Version OMA-ERELD_XDM-V2_0	24 Jul 2007	n/a	Status changed to Candidate by TP (2007-07-11 to 2007-07-24) TP ref # OMA-TP-2007-0284- INP_XDM_V2_0_ERP_for_Candidate_approval

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