Enabler Test Specification for XML Document Management Interoperability

Candidate Version 1.0 – 30 May 2006

Open Mobile Alliance

OMA-ETS-XDM_INT-V1_0-20060530-C

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Contents

1. Scope

This document describes in detail available test cases for Enabler XDM V1.0 (http://www.openmobilealliance.org).

The coverage of the tests includes Aggregation Proxy and Shared XDMS.

For the enabler specific XDM tests, see the corresponding enabler XDM ETS document (s).

2. References

2.1 Normative References

[IOPPROC]	"OMA Interoperability Policy and Process", Version 1.3, Open Mobile Alliance™, OMA-IOP-Process-V1_1, www.openmobilealliance.org
[RFC2119]	"Key words for use in RFCs to Indicate Requirement Levels", S. Bradner, March 1997, www.ietf.org/rfc/rfc2119.txt
[OMA-PoC-RD]	"Push to Talk over Cellular Requirements", Version 1.1, Open Mobile Alliance™, OMA-RD_PoC-V1_0, www.openmobilealliance.org
[OMA-PoC-AD]	"Push to Talk over Cellular Architecture", Version 1.1, Open Mobile Alliance™, OMA-AD_PoC-V1_0, www.openmobilealliance.org
[OMA-PoC-CP]	"Push to Talk over Cellular Control Plane", Version 1.1, Open Mobile Alliance™, OMA-TS-CP_PoC-V1_0, www.openmobilealliance.org
[OMA-TS-XDM_Core]	"XML Document Management (XDM) Specification", Version 1.0, Open Mobile Alliance™, OMA-TS-XDM_Core-V1_0, www.openmobilealliance.org
[OMA-TS_XDM_ Shared]	"Shared XDM Specification ", Version 1.0, Open Mobile Alliance™, OMA-TS-XDM_Shared-V1_0, www.openmobilealliance.org
[PoC_XDM]	"PoC XDM Specification", Open Mobile Alliance™, OMA-TS-XDM_PoC-V1_0, Version 1.0, http://www.openmobilealliance.org/
[Presence_XDM]	"Resource List Service (RLS) XDM Specification", Open Mobile Alliance™, OMA-TS-Presence_SIMPLE_RLS_XDM-V1_0, Version 1.0, http://www.openmobilealliance.org/
[RLS_XDM]	"Presence XML Document Management Specification", Version 1.0, Open Mobile Alliance™, OMA-TS-Presence_SIMPLE_XDM-V1_0, Version 1.0, http://www.openmobilealliance.org/

2.2 Informative References

[RFC2119]	"Key words for use in RFCs to Indicate Requirement Levels", S. Bradner, March 1997, URL:http://www.ietf.org/rfc/rfc2119.txt
[OMADICT]	"Dictionary for OMA Specifications", Open Mobile Alliance™. OMA-Dictionary, 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", are normative, unless they are explicitly indicated to be informative.

Following test case numbering scheme is followed in the ETS for different Test Sections.

Note: In following numbering scheme "int" stands for "Interoperability Test Cases".

Following is the definition of fields in the naming convention:

XDM-1.0	int	01	00
Specification Release (XDM Version) number.	int – interoperability	Test-category	Test Sequence Number

3.2 Definitions

user	A person using UE.
User[N]	A subscriber assigned to UE, where N is an integer number (i.e. User1, User2, etc.)
UE	A client terminal with assigned User[N] used for testing.
URI List	Number of URIs grouped together and as a list conforming to the definition in [OMA-TS_XDM_Shared].

3.3 Abbreviations

AD	Architecture Document
ETS	Enabler Test Specification
IMS	IP Multimedia Subsystem
IP	Internet Protocol
OMA	Open Mobile Alliance
PoC	Push to talk over Cellular
RD	Requirements Document
RLS	Resource List Server
SIP	Session Initiation Protocol
UE	User Equipment
URI	Universal Resource Identifier
XCAP	XML Configuration Access Protocol
XDM	XML Document Management
XDMC	XDM Client
XDMS	XDM Server
XML	Extensible Mark-up Language

3.4 Testing Policies

This section is intended to describe the testing policies used throughout the document.

It should be noted that the requirement of multi-company testing is compulsory for TestFest events, bilateral testing events and similar multi-company IOT events.

For the UE testing, the focus is on UE1 (from Company1) and UE2 (from Company2). UE1, UE2 and the XDMS MUST be from different vendors.

UE1 is used for test case execution (storage, retrieval and modification of the XML documents in XDMS).

UE2 is used only for verification of UE1's test cases execution (storage, retrieval and modification of the XML documents in XDMS).

UE1 and UE2 are from different companies and are preloaded with the same user credentials to validate that UE1 correctly manipulated XML documents.

3.5 Testing Assumptions

For all test cases throughout the document, the following assumptions are valid unless stated otherwise. Therefore, these assumptions shall be seen as a part of the preconditions:

General:

- • The UE implements XDMC and is able to communicate with an XDMS.

- • The XDMC establishes a connection to and downloads the required information from the XDMS during power up or during the initial retrieval of XML documents.

- • The UE is capable of indicating a successful retrieval of documents from an XDMS.

- • The UE is capable of indicating an unsuccessful retrieval of documents from an XDMS.

- • The UE is capable of indicating an unsuccessful authentication.

4. Introduction

The purpose of this document is to provide test cases for XDM Enabler Release V1.0.

The following items on an overall level are needed to adequately test the XDM Enabler:

- A Client that is comprised of XDMC plus one or more of the following: PoC Client, Watcher and/or Presence Source logical components
- Services specific XDM Servers, for instance, PoC XDMS, Presence XDMS and/or RLS XDMS.

Detailed information will be included in the specific test cases description.

The XDM Enabler tests are carried out using XCAP and SIP protocols. The transport protocols used are UDP, TCP and/or TLS.

5. XDM Test Cases

This section lists the steps needed for the execution of the XDM test cases.

5.1   Aggregation Proxy Test Cases

This section represents the test cases that will be executed by the following configurations of enablers:

- Client with XDMC

- Aggregation Proxy with a Shared XDMS

5.1.1   Authentication Test Cases

5.1.1.1   Normal Flow

5.1.1.1.1   XDM-1.0-int-0100 Authentication of XDMC in the UE

Test Case Id	XDM-1.0-int-0100
Test Object	UE with XDMC, Aggregation Proxy, Shared XDMS
Test Case Description	Verify that UE can be successfully authenticated by the Aggregation Proxy when retrieving documents over the XCAP interface. <u>TEST CASE GOAL:</u> Verify that when the UE initiates the communication with an XDMS, the Aggregation Proxy authenticates it.
Specification Reference	Refer to **Error! Reference source not found.**
SCR Reference	Refer to **Error! Reference source not found.**
Tool	Not available.
Test code	Not available.

Preconditions	• Equipment:
	  o UE (with User1 credentials)
	  o Aggregation Proxy
	  o Shared XDMS
	 • Prerequisite for this test:
	  o XDM-1.0-int-0150 – authentication failure test case executes successfully. This is to verify that the Aggregation Proxy is challenging the requests.
	  o Both, the UE and the Aggregation Proxy support the same type of authentication (definition of the authentication is outside of the scope of the ETS)
	  o User1 is preconfigured in the network with valid credentials
	  o The UE is powered off
	  o Authentication is enabled in the Aggregation Proxy
	  o The XDMC communicates with an XDMS when the user accesses the documents for the first time after power up
	  o UE does not have any documents stored locally for User1
	  o Logging might be required for this test case, in o rder to fully verify the successfull authentication

Test Procedure	1. UE is powered on. 2. XDMS is contacted to retrieve User1 document (s).

| Pass-Criteria | 2. No failed authentication indication is displayed to the user. (The UE may display the retrieved XDMS documents). |

5.1.1.2 Error Flow

5.1.1.2.1 XDM-1.0-int-0150 Too Many Failed Authentication Attempts by XDMC in UE

Test Case Id	XDM-1.0-int-0150
Test Object	UE with XDMC, Aggregation Proxy
Test Case Description	Verify that the Aggregation Proxy rejects too many failed authentication attempts by the UE. TEST CASE GOAL: Verify that the client will not be able to access XML documents during the initial communication attempt with an XDMS.
Specification Reference	Refer to **Error! Reference source not found.**
SCR Reference	Refer to **Error! Reference source not found.**
Tool	Not available.
Test code	Not available.
Preconditions	• Equipment: 　　o UE (with User1 credentials) 　　o Aggregation Proxy • Prerequisite for this test: 　　o The UE is powered off 　　o Both, the UE and the Aggregation Proxy support the same type of authentication 　　o User1 is preconfigured in the network with wrong credentials (for the Aggregation Proxy to reject authentication requests) 　　o Authentication is enabled in the Aggregation Proxy 　　o The "count of allowed challenges" in the Aggregation Proxy is set to 5 or less 　　o UE does not have any documents for User1
Test Procedure	1. UE is powered on. 2. XDMS is contacted to retrieve User1 document (s).
Pass-Criteria	2. Failed authentication indication is displayed to the user.

5.2 Shared XDMS Test Cases

Shared XDMS supports URI lists that can be used and shared by all OMA Enablers. Application specific enablers might name URI Lists diffferently, for instance, PoC application treats URI List as a Contact List. The test cases in this section can be executed using application non-specific XDMC or application specific XDMC (e.g. PoC XDMC, or Presence XDMC).

5.2.1 Document Management, Data Consistency and Authorization Test Cases

5.2.1.1 Normal Flow

5.2.1.1.1 XDM-1.0-int-0200 Shared XDMS Document Creation, Retrieval, Modification and Validation

Test Case Id	XDM-1.0-int-0200
Test Object	UE with XDMC, Aggregation Proxy, Shared XDMS
Test Case Description	Verify that the UE can create and retrieve an XML document from the Shared XDMS. TEST CASE GOAL: Verify that the creation of an URI List and/or addition of a member to that list creates an XML document in the Shared XDMS. The created document can be retrieved by the users.
Specification Reference	Refer to **Error! Reference source not found.**
SCR Reference	Refer to **Error! Reference source not found.**
Tool	Not available.
Test code	Not available.

Preconditions	• Equipment:
	      o 2 UEs (both with User1 credentials)
	      o Aggregation Proxy
	      o Shared XDMS
	 • Prerequisite for this test:
	      o XDM-1.0-int-0100 executes successfully
	      o Shared XDMS does not have any documents for User1
	      o UE1 and UE2 are powered off
	      o UE1 and UE2 support the same applications that use URI Lists (e.g. oma_allcontacts, oma_buddylist)

Test Procedure	1. UE1 is powered on. 2. A URI list is created using UE1. 3. User2 member is added to the URI List using UE1. 4. UE1 is powered off. 5. UE2 is powered on. 6. The URI List modified in Step 3 is retrieved using UE2.
Pass-Criteria	3. UE1 displays a URI List with User2 as a member. 6. UE2 displays a URI List with User2 as a member.

5.2.1.1.2 XDM-1.0-int-0201 Shared XDMS Element and Attribute Creation, Retrieval and Validation

Test Case Id	XDM-1.0-int-0201
Test Object	UE with XDMC, Aggregation Proxy, Shared XDMS

Test Case Description	Verify that the UE can create and retrieve XML elements and attributes from the Shared XDMS.
	<u>TEST CASE GOAL:</u> Add a member to already existing URI List. Verify that the member and the "uri" attribute of the member are created and stored correctly in the Shared XDMS.
Specification Reference	Refer to **Error! Reference source not found.**
SCR Reference	Refer to **Error! Reference source not found.**
Tool	Not available.
Test code	Not available.

Preconditions	• Equipment:
	
	   o 2 UEs (both with User1 credentials)
	
	   o Aggregation Proxy
	
	   o Shared XDMS
	
	• Prerequisite for this test:
	
	   o XDM-1.0-int-0100 – executes succesfully
	
	   o User1 has a previously created URI list stored in the Shared XDMS. The URI list does not contain a user with a display name User3. The URI list may have other members.
	
	   o UE1 and UE2 are capable of displaying the URIs of the URI List members
	
	   o UE1 is powered on, UE2 is powered off
	
	   o UE1 and UE2 support the same applications that use URI Lists (e.g. oma_allcontacts, oma_buddylist)

Test Procedure	1. The User3 member is added to the URI List using UE1.
	
	2. The properties of User3 are retrieved using UE1 and noted:
	
	   a. User3 URI (mandatory attribute)
	
	   b. User3 display name (optional element)
	
	3. UE1 is powered off.
	
	4. UE2 is powered on.
	
	5. The URI List modified in Step 1 is retrieved using UE2.
	
	6. The properties of User3 are retrieved using UE2:
	
	   a. User3 URI (mandatory attribute)
	
	   b. User3 display name (optional element).

Pass-Criteria	2. User3 properties are displayed on UE1:
	
	   a. The User3 URI
	
	   b. The User3 display name (optional)
	
	6. User3 properties are displayed on UE2:
	
	   a. User3 URI. The URI of User3 is identical to the URI seen in Step 2.
	
	   b. User3 display name (optional). The display name of User3 is identical to the display name seen in Step 2.

5.2.1.1.3 XDM-1.0-int-0202 Shared XDMS Element Modification, Retrieval and Validation (Includes Optional Features)

Test Case Id	XDM-1.0-int-0202

Test Object	UE with XDMC, Aggregation Proxy, Shared XDMS
Test Case Description	Verify that the user can modify and retrieve an element of an XML document. TEST CASE GOAL: Modify a <display-name> element of an existing member in the existing URI List and verify that the URI List's XML document is updated correctly in the Shared XDMS.
Specification Reference	Refer to **Error! Reference source not found.**
SCR Reference	Refer to **Error! Reference source not found.**
Tool	Not available.
Test code	Not available.

Preconditions	• Equipment:
	    o 2 UEs (both with User1 credentials)
	    o Aggregation Proxy
	    o Shared XDMS
	
	 • Prerequisite for this test:
	    o XDM-1.0-int-0100 – successfully executes
	    o UE1 is powered on, UE2 is powered off
	    o UE1 and UE2 support <display-name> element
	    o UE1 is capable of modifying the display name of the URI List member
	    o A URI List exists in the XDMS for User1. The list has a member with the display name User2. A member with the display name User3 does not exist in the URI list. The list may contain other members.
	    o UE1 and UE2 are capable of displaying the URIs of the URI List members
	    o UE1 and UE2 support the same applications that use URI Lists (e.g. oma_allcontacts, oma_buddylist)

Test Procedure	1. User2 is selected from a URI List using UE1. 2. The URI of User2 is selected using UE1 and noted. 3. The display name of the User2 is changed from User2 to User3 using UE1. 4. UE1 is powered off. 5. UE2 is powered on. 6. The URI List modified in Step 2 is retrieved using UE2. 7. The URI of User3 is selected using UE2 and compared to the noted URI in Step 2.
Pass-Criteria	1. UE1 displays the display name of User2 in a URI List. 2. UE1 displays the URI of User2. 7. UE2 displays the URI of User3. The URI displayed on UE2 is identical to the URI noted in Step 2.

5.2.1.1.4 XDM-1.0-int-0203 Shared XDMS Document Modification, Retrieval and Validation (Modificaton by Addition of a New Element)

Test Case Id	XDM-1.0-int-0203
Test Object	UE with XDMC, Aggregation Proxy, Shared XDMS

Test Case Description	Verify that the user can modify and retrieve an XML document.
	TEST CASE GOAL: Add a member to the existing URI List and verify that the URI List's XML document is updated correctly in the Shared XDMS. The modification of the XML document is achieved with the addition of an <entry> element.
Specification Reference	Refer to **Error! Reference source not found.**
SCR Reference	Refer to **Error! Reference source not found.**
Tool	Not available.
Test code	Not available.
Preconditions	• Equipment:
	o 2 UEs (both with User1 credentials)
	o Aggregation Proxy
	o Shared XDMS
	• Prerequisite for this test:
	o XDM-1.0-int-0100 – successfully executes
	o UE1 is powered on, UE2 is powered off
	o A URI List exists in the XDMS for User1. The list has a member with the display name User2. A member with the display name User3 does not exist in the URI list. The list may contain other members.
	o UE1 and UE2 support the same applications that use URI Lists (e.g. oma_allcontacts, oma_buddylist)
Test Procedure	1. A URI List is retrieved using UE1.
	2. User3 is added to the URI List retrieved in Step 1 using UE1.
	3. UE1 is powered off.
	4. UE2 is powered on.
	5. A URI List modified in Step 2 is retrieved using UE2.
Pass-Criteria	1. UE1 displays a URI List containing User2.
	2. UE1 displays a URI List containing User2 and User3.
	5. UE2 displays a URI List containing User2 and User3. The list is identical to the list in Step 2.

5.2.1.1.5 XDM-1.0-int-0204 Shared XDMS Document Modification, Retrieval and Validation (Modification by Element Deletion)

Test Case Id	XDM-1.0-int-0204
Test Object	UE with XDMC, Aggregation Proxy, Shared XDMS
Test Case Description	Verify that a user can modify an XML document by deleting one of its XML elements.
	TEST CASE GOAL: Delete a member of a URI List and verify that the list's XML document stored in the Shared XDMS is updated correctly. The XML document does not contain the element that represents the deleted member.
Specification Reference	Refer to **Error! Reference source not found.**
SCR Reference	Refer to **Error! Reference source not found.**
Tool	Not available.
Test code	Not available.

Preconditions	• Equipment:
	    o 2 UE (both with User1 credentials)
	    o Aggregation Proxy
	    o Shared XDMS
	 • Prerequisite for this test:
	    o XDM-1.0-int-0100 – executes successfully
	    o UE1 is powered on, UE2 is powered off
	    o A URI List exists in the Shared XDMS for User1. The list has at least one member (User2).
	    o UE1 and UE2 support the same applications that use URI Lists (e.g. oma_allcontacts, oma_buddylist)

Test Procedure	1. A URI List and its members are retrieved using UE1. 2. User2 is selected and deleted using UE1. 3. UE1 is powered off. 4. UE2 is powered on. 5. Manipulated in Step 2 URI List and its members are retrieved using UE2.
Pass-Criteria	1. UE1 displays the member list of a URI List. User2 is among the members of the list. 2. UE1 displays the member list of the URI List. There is no User2 in the list. 5. UE2 displays the member list of the URI List modified in Step 2. There is no User2 in the list.

5.2.1.2 Error Flow

Not Available.

5.2.2 Authorization Test Cases

5.2.2.1 Normal Flow

In the release 1 of XDM Enabler, only the owner of the document can be its primary principal. Currently, it is also not possible to change the primary principal. The owner authorization rules are tested in the section 5.2.1. Successful execution of these test cases represents successful authorization.

5.2.2.2 Error Flow

Not Available

5.2.3 Data Consistency Test Cases

The data consistency scenarios for the same end user are tested in section 5.2.1. The data consistency scenarios tested with multiple users are not available in the release 1 of XDM Enabler. Only the primary principal (the creator) of the document will be able to read, write, modify, and delete his/her documents; and therefore, other users will not be able to test with primary principle's documents.

5.2.3.1 Normal Flow

Not Available

5.2.3.2 Error Flow

Not Available.

Appendix A. Change History   (Informative)

A.1 Approved Version History

Reference	Date	Description
OMA-ETS-XDM-V1_0-20050719-D	16 Aug 2005	Initial version

A.2 Draft/Candidate Version 1.0 History

Document Identifier	Date	Sections	Description
Draft Versions OMA-ETS-XDM-V1_0-20050425-D	25 Apr 2005	all	First draft
Draft Versions OMA-ETS-XDM-V1_0-20050525-D	25 May 2005	all	Second draft based on the review of XDM ETR mapping table.
Draft Versions OMA-ETS-XDM-V1_0-20050527-D	27 May 2005	all	Draft after first review.
Draft Versions OMA-ETS-XDM-Interoperability-V1_0-20050527-D	27 May 2005	all	Comments after final review during interim meeting.
Draft Version OMA-ETS-XDM-Interoperability-V1_0-20050601-D	01 Jun 2005	all	Comments and changes throughout document: • You can not access a contact list without the use of a shared XDMS. This is where they are stored even if it's in the same box as the PoC XDMS, logically it's a separate entity as required by XDM. • Users can not share the same lists in XDM 1.0, there is no way to delegate permissions to retrieve files to other users. • Addition of a mandate that the testing needs to use terminals from different vendors • Clarification to testing assumptions • Editorial changes
Draft Version OMA-ETS-XDM-Interoperability-V1_0-20050608-D	08 Jun 2005	3.5, 5.3.1.1.4, 5.3.1.1.5, Appendix A	• Incorporated comments from contribution: OMA-IOP-POC-2005-0108R01-XDM-ETS-Assumptions-Clarification • Incorporated comments from contribution: OMA-IOP-POC-2005-0107-XDM-Test-Cases-Order-Switch • Addition of SCR table mapping
Draft Version OMA-ETS-XDM-Interoperability-V1_0-20050709-D	09 Jul 2005	5.2 5.4 5.5 Appendix A	• Added new test cases to Shared XDM section • Changed Contact List to URI List in Shared XDM Section • Added Presence XDM test cases • Added RLS XDM test cases • Modifications to SCR table mapping references • Editorial changes in whole document

Draft Version
OMA-ETS-XDM-Interoperability-V1_0-20050714-D
	14 Jul 2005	all	• Review of new test cases
			• Modifications to new test cases
			• Major changes:
			  o Moved testing of display name element to optional section
			  o UE extraction of data from XDMS

Draft Version OMA-ETS-XDM-Interoperability-V1_0-20050719-D	19 Jul 2005	5.2 5.3 6.1 6.2	• Incorporated comments from contribution: OMA-IOP-POC-2005-0140R01-CR-against-XDM-ETS-interoperability

Draft Version OMA-ETS-XDM_INT-V1_0-20050902-D	02 Sep 2005	All	• Split of ETS documents
			   o Removed enabler specific test cases
			   o Test cases that are left are for XDM Enabler only (Aggregation Proxy and Shared XDMS)
			• Renaming of test cases
			   o Removed optional and mandatory due to approved IOP CR: OMA-IOP-2005-0166R01-Clarification-on-optional-mandatory-TC-for-ETS
			   o Renumbered test cases
			• Added clarification about the uage policy of UE1 and UE2 (based on the feedback from TestFest participants to IOP-PoC SWG)
			• Added INT to ETS name according to CR: OMA-IOP-POC-2005-0156R01-Naming-of-ETS-in-IOP-PoC-SWG
			• Added previously removed draft history

Draft Version OMA-ETS-XDM_INT-V1_0-20050906-D	06 Sep 2005	All	• Removed track changes • Added to IOP-PoC internal documents as a stand alone ETS (result of CR OMA-IOP-POC-2005-0174-XDM-ETS-Split)
Draft Version OMA-ETS-XDM_INT-V1_0-20050909-D	09 Sep 2005	3.4 5.2.1.1.3	• Added changes according to CR: OMA-IOP-POC-2005-0186R01-Client-Server-Testing-Policies-for-XDM-ETS • Added changes according to CR: OMA-IOP-POC-2005-0184-Optional-Feature-Notation-in-ETS
Draft Version OMA-ETS-XDM_INT-V1_0-20051020-D	10 Oct 2005	3.4 5.2.1.1.3 Appendix A	• Added changes according to CR: OMA-IOP-POC-2005-0186R02-Client-Server-Testing-Policies-for-XDM-ETS • OMA-IOP-POC-2005-0232-Optional-Feature-Notation-in-ETS-Summary
Draft Versions OMA-ETS-XDM_INT-V1_0-	05 May 2006	All	Incorporated the following CRs: • OMA-IOP-MEC-2006-0234-XDM-CR_IOP_Part_to_Fix_PR14
	11 May 2006	n/a	Agreed by IOP WG Document prepared for TP Notification Style corrections to sections 2 and 3 History moved from Appendin b to Appendix A
OMA-ETS-XDM_INT-V1_0-20060530-C	30 May 2006	n/a	Status changed to Candidate by TP R&A (2006-05-17 to 2006-05-30) OMA-TP-2006-0195-XDM_INT_ETS_for-Candidate_Approval

Appendix B.   SCR and Specification References

Test Case Number in ETS	SCR-reference	Spec (AD,CP,UP)-reference
XDM-1.0-int-0100	XDM-XDMC-C-001:M XDM-XDMC-C-002:M XDM-XDMC-C-005:M XDM-XDMC-C-006:M XDM-XDMS-S-001:M XDM-XDMS-S-005:M XDM-AP-S-001:M XDM-AP-S-002:M XDM-AP-S-004:M XDM-AP-S-005:M XDM-AP-S-007:O	**OMA-XDM-Spec:** 5.2 6.3.1 6.4.1 6.1.1.1 6.1.1.2 6.2.1 6.3 6.3.2 6.3.3 6.4 6.4.2 6.4.3 RFC 2617
XDM-1.0-int-0150	XDM-XDMC-C-001:M XDM-XDMC-C-002:M XDM-XDMC-C-005:M XDM-XDMC-C-006:M XDM-XDMS-S-001:M XDM-XDMS-S-005:M XDM-AP-S-001:M XDM-AP-S-002:M XDM-AP-S-004:M XDM-AP-S-007:M	**OMA-XDM-Spec:** 5.2 6.3.1 6.4.1 6.1.1.1 6.1.1.2 6.2.1 6.3 6.3.2 6.3.3 6.4 6.4.2 6.4.3 RFC 2617
XDM-1.0-int-0200 XDM-1.0-int-0201 XDM-1.0-int-0202 (Includes Optional Features) XDM-1.0-int-0203 XDM-1.0-int-0204	XDM-XDMC-C-001:M XDM-XDMC-C-002:M XDM-XDMC-C-005:M XDM-XDMC-C-006:M XDM-XDMS-S-001:M XDM-XDMS-S-005:M XDM-AP-S-001:M XDM-AP-S-002:M XDM-AP-S-004:M XDM-AP-S-007:M	**OMA-XDM-Spec:** 6.1.1.2 6.2.1 5.2 6.1.1.1 6.3 6.3.1 6.3.2 6.4 6.4.1 6.4.2 6.4.3