OMA PoC Document Management

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Open Mobile Alliance

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1. Scope

This specification describes the documents used by the PoC Enabler, including description of the PoC Enabler specific usage of data formats and XCAP Application Usages defined in the XDM Enabler. Additionally, this document specifies PoC Enabler specific deviations and extensions to the XDM Enabler documents. This document also specifies the PoC specific XCAP Application Usages.

2. References

2.1 Normative References

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[OMA PoC V1.0 XDM]	"PoC XDM Specification", Version 1.0, Open Mobile Alliance™, OMA-TS-PoC_XDM-V1_0, URL: http://www.openmobilealliance.org/.
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[XDM _POLICY]	"Policy XDM Specification", Version 1.1, Open Mobile Alliance™, OMA-TS-XDM_Policy_Group-V1_1,

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[XSD-1_POCUSAGE]	"PoC – PoC usage", Version 1.0, Open Mobile Alliance™, OMA-SUP-XSD_poc_pocusage-V1_0, URL: http://www.openmobilealliance.org/
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[XSD-2_1_GROUP_EXT]	"PoC – PoC Group extensions", Version 2.1, XDM2.1 Extensions" Open Mobile Alliance™, OMA-SUP-XSD_poc_poc2_1SharedGroupExt-V2_1, URL: http://www.openmobilealliance.org/

2.2   Informative References

[OMA Dictionary]	"Dictionary for OMA Specifications", Version 2.6, Open Mobile Alliance™, OMA-ORG-Dictionary-V2_6, URL: http://www.openmobilealliance.org/
[OMA-PoC-AD]	"Push to talk over Cellular (PoC) - Architecture", Version 2.1, Open Mobile Alliance™, OMA-AD-PoC-V2_1, URL: http://www.openmobilealliance.org/
[OMA-PoC-CP]	"OMA PoC Control Plane", Version 2.1, Open Mobile Alliance™, OMA-TS-PoC_ControlPlane-V2_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" and "Introduction", are normative, unless they are explicitly indicated to be informative.

3.2 Definitions

For the purposes of the PoC specifications, the terms and definitions given in [OMA Dictionary] and the following terms and definitions apply.

Active PoC Dispatcher	PoC User currently taking the role of PoC Dispatcher for all the Dispatch PoC Sessions of a Dispatch PoC Group. The Active PoC Dispatcher can change along time between PoC Users that are allowed the role of PoC Dispatcher for the Dispatch PoC Group (e.g. through role transfer mechanisms).
Ad-hoc PoC Group Session	A PoC Group Session established by a PoC User to PoC Users listed on the invitation. The list includes PoC Users or PoC Groups or both.
Application Unique ID	A unique identifier that differentiates XCAP resources accessed by one application from XCAP resources accessed by another application. (Source: [RFC4825])
Application Usage	Detailed information on the interaction of an application with an XCAP Server. (Source: [RFC4825])
Audio	General communication of sound with the exception of PoC Speech.
Chat PoC Group	A persistent PoC Group in which a PoC User individually joins to have a PoC Session with other joined PoC Users, i.e., the establishment of a PoC Session to a Chat PoC Group does not result in other PoC Users being invited. NOTE: A Chat PoC Group is a persistent PoC Group where the <invite-members> element is set to "false" as specified in the [OMA-PoC-Document-Mgmt] "PoC Group".
Chat PoC Group Session	A PoC Session established to a Chat PoC Group.
Controlling PoC Function	A function implemented in a PoC Server, providing centralized PoC Session handling, which includes Media distribution, Talk Burst Control, Media Burst Control, policy enforcement for participation in the PoC Group Sessions, and the Participant information.
Discrete Media	Media that itself does not contain an element of time (e.g. images, text).
Dispatch PoC Group	A Pre-arranged PoC Group in which one member is assigned the role of PoC Dispatcher and the other member(s) are assigned the role of PoC Fleet Members.
Dispatch PoC Session	The PoC Session of a Dispatch PoC Group, or a subset of the Dispatch PoC Group, in which the 1-many-1 communication method is used.
Global Document	A document placed under the XCAP Global Tree that applies to all users of that application usage.
Global Tree	A URI that represents the parent for all Global Documents for a particular application usage within a particular XCAP Root.
Group	A predefined set of Users together with its policies and attributes. A Group is identified by a SIP URI.
Group Advertisement	A feature that provides the capability to inform other PoC Users of the existence of a PoC Group.
Group Usage List	A list of group names or service URIs that are known by the XDM Client
Media	Forms of information that are exchanged between Participants. Media may come in different forms, which are referred to as Media Types.
Media Burst Control	Media Burst Control is a control mechanism that arbitrates requests from the PoC Clients, for the right to

send Media and Multimedia.

Media Burst Control Schemes	Way of using Media Burst Control according to predefined rules and procedures.
Media Streaming Control	A Media Type allowing Participants to control a Continuous Media stream using RTSP in a PoC Session.
Media Type	Media Types share a characteristic of human perception. Media Types are either realtime or non-realtime, like: • PoC Speech • Audio (e.g. music) • Video • Discrete Media (e.g. still image, formatted and non-formatted text, file) • Media Streaming Control (RTSP)
Multimedia	Multimedia is the simultaneous existence of multiple Media Types like • audiovisual • video plus subtitles Multimedia from a single source that involves real-time Media Types are assumed to be synchronized.
NW PoC Box	A PoC functional entity in the PoC Network where PoC Session Data and PoC Session Control Data can be stored
Participant	A Participant is a PoC User in a PoC Session.
Participant Information	Information about the PoC Session and its Participants.
Participating PoC Function	A function implemented in a PoC Server, which provides PoC Session handling, which includes policy enforcement for incoming PoC Sessions and relays Talk Burst Control and Media Burst Control messages between the PoC Client and the PoC Server performing the Controlling PoC Function. The Participating PoC Function may also relay RTP Media between the PoC Client and the PoC Server performing the Controlling PoC Function.
PoC Box	A PoC functional entity where PoC Session Data and PoC Session Control Data can be stored. It can be a NW PoC Box or a UE PoC Box.
PoC Client	A functional entity that resides on the User Equipment that supports the PoC service.
PoC Crisis Event Handling Entity	A functional Entity in the PoC Network authorizing PoC Users to initiate or join Crisis PoC Sessions. The PoC Crisis Event Handling Entity enforces the local policy for National Security, Public Safety and Private Safety applications within a country or a sub-division of a country. NOTE: The PoC Crisis Event Handling Entity complements the emergency service.
PoC Dispatcher	The Participant in a Dispatch PoC Session that sends Media to all PoC Fleet Members and that receives Media from any PoC Fleet Member. NOTE: The PoC Dispatcher is an enhancement to the PoC 1 Distinguished Participant.
PoC Fleet Member	A Participant in a Dispatch PoC Session that is only able to send Media to the PoC Dispatcher, and that likewise is only able to receive Media from the PoC Dispatcher. NOTE: PoC Fleet Member is the same as Ordinary Participant in PoC 1.
PoC Group	A Group supporting the PoC service. PoC User uses PoC Groups e.g. to establish PoC Group Sessions.
PoC Group Identity	A SIP URI identifying a Pre-arranged PoC Group or a Chat PoC Group. A PoC Group Identity is used by the PoC Client e.g. to establish PoC Group Sessions to the Pre-arranged PoC Groups and Chat PoC Groups.
PoC Group Name	Indicates the name of the PoC Group that can be presented to the PoC User.
PoC Group Session	A Pre-arranged PoC Group Session, Ad-hoc PoC Group Session or Chat PoC Group Session.

PoC Network	Network comprising of a SIP/IP Core and PoC Server(s), which provide PoC capabilities to the associated PoC capable User Equipments which are compliant with OMA PoC Service Enabler specifications.
PoC Session	A PoC Session is a SIP Session established by the procedures of this specification. This specification supports the following types of PoC Sessions: 1-1 PoC Session, Ad-hoc PoC Group Session, Pre-arranged PoC Group Session, or Chat PoC Group Session.
PoC Session Control Data	Information about PoC Session Data e.g. time and date, PoC Session initiator.
PoC Session Data	Media Bursts and Media Burst Control information exchanged during a PoC Session e.g. Video frames, an image or Talk Burst.
PoC Session Identity	SIP URI, which identifies the PoC Session and which can be used for routing initial SIP requests. It is received by the PoC Client during the PoC Session establishment in the Contact header and/or in the MBCP Connect message in case of using Pre-established Session.
PoC Speech	Communication of speech as defined by PoC version 1.0.
PoC Subscriber	Is one whose service subscription includes the PoC service. A PoC Subscriber can be the same person as a PoC User. NOTE: In [OMA-PoC-RD-V1.0] the term "PoC Subscriber" is sometimes used to mean the same as term "PoC User" in [OMA-PoC-AD], [OMA-PoC-CP] and [OMA-PoC-UP].
PoC User	A User of the PoC service. A PoC User can be the same person as a PoC Subscriber. A PoC User uses the PoC features through the User Equipment.
PoC User Access Policy	A rule-based plan of actions that defines the criteria for access to the PoC User. The plan describes the expected pattern of behaviour of the PoC User at access attempts from other PoC Users.
Pre-arranged PoC Group	A persistent PoC Group. The establishment of a PoC Session to a Pre-arranged PoC Group results in the members being invited. NOTE: A Pre-arranged PoC Group is a persistent PoC Group, where the <invite-members> element is set to "true".
Pre-arranged PoC Group Session	A PoC Session established by a PoC User to a Pre-arranged PoC Group.
RTP Media	The Media carried in an RTP payload.
SIP Session	A SIP dialog. From [RFC3261], a SIP dialog is defined as follows: A dialog is a peer-to-peer SIP relationship between two UAs that persists for some time. A dialog is established by SIP messages, such as a 2xx response to an INVITE request. A dialog is identified by a call identifier, local tag, and a remote tag. A dialog was formerly known as a call leg in [RFC2543].
SIP URI	From RFC 3261: "A SIP or SIPS URI identifies a communications resource" and "follows the guidelines in RFC 2396 [5]". PoC uses SIP URIs to identify PoC Clients, PoC Servers, and PoC Sessions, resource lists that point to URI Lists, etc.
Talk Burst	A flow of PoC Speech from a PoC Client having the permission to send PoC Speech as specified in PoC version 1.0.
Talk Burst Control	A control mechanism that arbitrates requests from the PoC Clients for the right to send PoC Speech as specified in [OMA PoC V1.0].
UE PoC Box	A functional entity co-located with the PoC Client in the User Equipment where PoC Session Data and PoC Session Control Data can be stored.
URI List	A list of URIs.
User	Any entity that uses the described features through the User Equipment.
User Equipment	A hardware device that supports a PoC Client e.g., a wireless phone.
Video	Communication of live-streamed pictures without any Audio component.
XCAP Application Usage	Detailed information on the interaction of an XCAP Client with an XCAP Server. (Source: [RFC4825])

XCAP Client	An HTTP client that understands how to follow the naming and validation constraints defined in this specification.
XCAP Root	A context that includes all of the documents across all application usages and users that are managed by a server.
XCAP Server	An HTTP server that understands how to follow the naming and validation constraints defined in this specification.

3.3   Abbreviations

AUID	Application Unique ID
HTTP	Hypertext Transfer Protocol
MIME	Multipurpose Internet Mail Extensions
NW	Network
OMA	Open Mobile Alliance
PoC	Push to talk over Cellular
UE	User Equipment
URI	Uniform Resource Identifier
XCAP	XML Configuration Access Protocol
XDM	XML Document Management
XDMC	XDM Client
XDMS	XDM Server
XML	Extensible Markup Language
XUI	XCAP User Identifier

4. Introduction

This specification specifies the usage of documents used by the PoC Enabler. The described PoC specific usages include the usage of the XML schemas and Application Usages for Group documents, User Access Policy documents and Group Usage List documents and PoC Session documents. XDM Application Usages include that for PoC Groups and PoC User Access Policy, which are specified in details in [XDM_POLICY] as User Access Policy and in [XDM_GROUP] as Group. The PoC specific Application Usages include that for PoC Sessions. Additionally, this specification describes the usage of the XML schema for the Group Advertisement, which is specified in [XDM_GROUP] as Extended Group Advertisement. This specification also defines the PoC specific deviations and extensions to the XML schemas for the Group, the User Access Policy, Group Usage List, and Extended Group Advertisement documents.

XDM 2.0 and XDM 2.1 Clients use the AUIDs and the protocol specified in [OMA PoC V1.0 XDM], if the PoC Enabler Release 1 is indicated by the provisioning.

In addition to above the backward compatibility towards PoC V1.0 is ensured by appropriate configuration of the Aggregation Proxy and the special handling of PoCv1.0 level requests in the Shared XDMS.

XDM 2.1 Client uses the AUIDs and the protocol specified in [OMA-PoC-V2.0-Document-Mgmt] if the PoC Enabler Release 2.0 is indicated by the provisioning.

NOTE: Usage of all PoCv2.1 functionalities requires XDMv2.1 functionalities.

4.1   Version 1.0

This subclause summarizes the usage of documents and Application Usages in PoC version 1.0 as specified in [OMA PoC V1.0 XDM].

The PoC version 1.0 defines the following PoC specific documents:

- PoC Group
- PoC User Access Policy

The PoC version 1.0 re-uses the following XDM 1.1 documents:

- Group Usage List

The PoC version 1.0 extends XDM 1.1 Group Usage List documents with PoC specific XML schemas for the following:

- Type of PoC Group

The PoC version 1.0 defines usage of PoC specific Application Usages for PoC Group documents and PoC User Access Policy documents. The PoC version 1.0 defines usage of XDM specific Application Usages for Group Usage List documents

4.2   Version 2.0

This subclause summarizes the usage of documents and Application Usages in PoC version 2.0 as specified in [OMA-PoC-V2.0-Document-Mgmt].

The PoC version 2.0 re-uses the following XDM 2.0 documents:

- User Access Policy
- Group
- Group Usage List
- Extended Group Advertisement

NOTE 1: Group document is composed of PoC Group document re-used from PoC version 1.0 Enabler and XML schema extension described in [SHARED_GROUP_XDM].

NOTE 2: Extended Group Advertisement document is composed of Group Advertisement document re-used from PoC version 1.0 Enabler and XML schema extension described in [SHARED_GROUP_XDM].

The PoC version 2.0 extends XDM 2.0 User Access Policy documents with PoC specific XML schemas for the following:

- PoC Box

The PoC version 2.0 extends XDM 2.0 Group documents with PoC specific XML schemas for the following:

- Active PoC Dispatcher
- Media Burst Control Schemes

The PoC version 2.0 extends XDM 2.0 Group Usage List documents with PoC specific XML schemas for the following:

- Type of PoC Group

The PoC version 2.0 extends XDM 2.0 Extended Group Advertisement documents with PoC specific XML schemas for the following:

- Dispatch PoC Group

The PoC version 2.0 defines usage of XDM specific Application Usages for Group documents, User Access Policy documents and Group Usage List documents.

4.3   Version 2.1

This subclause summarizes the usage of documents and Application Usages in PoC version 2.1 as specified in this document.

The PoC version 2.1 defines the following PoC specific documents:

- PoC Sessions

The PoC version 2.1 re-uses the following XDM 2.1 documents:

- User Access Policy
- Group
- Group Usage List
- Extended Group Advertisement

NOTE 1: Extended Group Advertisement document is composed of Group Advertisement document re-used from PoC version 1.0 Enabler and XML schema extension described in [XDM_GROUP].

NOTE 2: Group document is composed of PoC Group document re-used from PoC version 1.0 Enabler and XML schema extensions described in [XDM_GROUP].

The PoC version 2.1 extends XDM 2.1 User Access Policy documents with PoC specific XML schemas for the following:

- PoC Box

The PoC version 2.1 extends XDM 2.1 Group documents with PoC specific XML schemas for the following:

- Active PoC Dispatcher
- Media Burst Control Schemes
- PoC Group specific releasing rules

- PoC Crisis Event Handling

- Moderator

The PoC version 2.1 extends XDM 2.1 Group Usage List documents with PoC specific XML schemas for the following:

- Type of PoC Group

The PoC version 2.1 extends XDM 2.1 Extended Group Advertisement documents with PoC specific XML schemas for the following:

- Dispatch PoC Group

The PoC version 2.1 defines usage of PoC specific Application Usages for PoC Sessions documents The PoC version 2.1 defines usage of XDM specific Application Usages for Group documents, User Access Policy documents and Group Usage List documents.

5. PoC XDM Application Usages

5.1 PoC Group

> NOTE: In PoC 2.1 the Group definitions are described in the [XDM_GROUP]. PoC Groups are still available for network elements and XDM Clients, that are compliant with PoC 1.0 Enabler Release by using the AUID specified in the PoC 1.0 as specified in [OMA PoC V1.0 XDM].

PoC Group is described in the [XDM_GROUP] "*Group*". The use of the elements of PoC Groups is described in [OMA-PoC-CP].

5.1.1 Structure

The general Group structure is described in the [XDM_GROUP] "*Structure*" with the PoC Enabler specific clarifications and deviations specified in this subclause and the additional, PoC specific structure, in the subclause 6.2.1"*Structure*".

The following elements and attributes of the <list-service> element together with their usage are used by PoC Enabler as specified in [XDM_GROUP]:

   a) a "uri" attribute containing the PoC Group Identity;

   b) other attributes from any other namespaces for the purpose of extensibility;

   c) a <display-name> element containing a PoC Group Name;

   d) a <list> element containing the PoC Group Members;

   e) an <invite-members> element;

   f) a <max-participant-count> element containing a maximum number of allowed PoC Users in a Pre-arranged PoC Group Session and a Chat PoC Group Session;

   g) a <ruleset> element representing the authorization policy associated with this PoC Group;

   h) a <subject> element containing a topic or description of the Group;

   i) a <supported-services> element containing supported services of the PoC Group;

   j) a <qoe> element indicating the Quality of Experience Profile assigned to the PoC Group.

   k) <min-participant-count> element representing the minimum number of participants needed for a PoC Group Session to become active or remain active

   l) <required-participants> element representing who must participate for a PoC Group Session to become active or remain active

   m) <max-duration> element representing the maximum allowed time duration of a Group Session

> NOTE: When the PoC Group is created, the <automatic-group-advertisement> element can be used in the Group definition, as defined in the [XDM_GROUP], if Group Advertisement is desired to be sent automatically to the PoC Group members as specified in the [XDM_GROUP].

The following elements and attributes of the <list> element together with their usage are used by PoC Enabler as specified in [XDM_GROUP]:

   a) an <entry> element;

   b) an <external> element.

The following elements and attributes of the <ruleset> element together with their usage are used by PoC Enabler as specified in [XDM_GROUP]:

    a)   an <rule> element.

The following elements and attributes of the <conditions> child element of any <rule> element together with their usage are used by PoC Enabler as specified in [XDM_GROUP]:

    a)   the <identity> element;

    b)   the <external-list> element;

    c)   the <other-identity> element;

    d)   the <is-list-member> element.

The following elements and attributes of the <actions> child element of any <rule> element together with their usage are used by PoC Enabler as specified in [XDM_GROUP]:

    a)   the <allow-conference-state> element;

    b)   the <allow-invite-users-dynamically> element;

    c)   the <join-handling> element;

    d)   the <allow-initiate-conference> element;

    e)   the <allow-anonymity> element;

    f)   the <is-key-participant> element;

    g)   the <allow-subconf> element;

    h)   the <allow-media-handling> element;

    i)   the <remove-media-handling> element;

    j)   the <allow-expelling> element;

    k)   the <block-group-advertisement-sending> element.

5.1.2 Application Unique ID

Application Unique ID is described in the [XDM_GROUP] "*Application Unique ID*".

5.1.3 XML schema

XML schema is described in the [XDM_GROUP] "*XML Schema*". The PoC specific XML schema extensions are described in subclause 6.2.2 "*XML schema*".

5.1.4 Default namespace

Default namespace is described in the [XDM_GROUP] "*Default Namespace*".

5.1.5 MIME type

MIME type is described in the [XDM_GROUP] "*MIME Type*".

5.1.6 Validation constraints

Validation constraints are described in the [XDM_GROUP] "*Validation Constraints*".

5.1.7 Data semantics

Data semantics are described in the [XDM_GROUP] "*Data Semantics*" with the PoC specific clarifications specified in this subclause. The data semantics for PoC specific extensions are described in subclause 6.2.4 "*Data semantics*".

A group data is applicable to PoC service only if the condition element <supported-services> is present, and

- 1. the child element <service> includes the "enabler" attribute value "poc"; or,
- 2. the child element <all-services-except> does not include a <service> child element with "enabler" attribute value "poc".

The <group-media> element, which is a child element of <service>:

The sub-element <full-duplex> is not applicable for Audio and Video in PoC Service.

Group documents including elements with "must-understand" attribute and not used by PoC Enabler SHALL be regarded as not applicable to PoC service.

The <invite-members> element :

"true"   represents the Pre-arranged PoC Group.

"false"   represents the Chat PoC Group. This value is used when the element is not present.

A <group-media> element with a list of media elements is used to specify allowed media types. List of possible media elements defined in PoC are:

1) The <message-session> media element indicating session based messaging as defined in [RFC4975];

2) The <file-transfer> media element indicating file transfer as defined in [OMA_IM_TS_ Endorsement];

3) The <audio> media element indicating a streaming media type as defined in [RFC3840];

4) The <video> media element indicating a streaming media type as defined in [RFC3840];

5) The <poc-speech> media element indicating a PoC speech media type as defined in [OMA-PoC-CP];

6) The <group-advertisement> media element indicating a group advertisement as defined in [XDM_GROUP] "*Extended Group Advertisements*".

NOTE: All other media elements not listed in the list above are ignored by the PoC Server.

5.1.8 Naming conventions

Naming conventions are described in the [XDM_GROUP] "*Naming conventions*".

5.1.9 Global Documents

Global Documents are described in the [XDM_GROUP] "*Global Documents*".

5.1.10 Resource interdependencies

Resource interdependencies are described in the [XDM_GROUP] "*Resource interdependencies*".

5.1.11 Authorization policies

Authorization policies are described in the [XDM_GROUP] "*Authorization policies*".

5.2 PoC User Access Policy

NOTE: In PoC 2.1 the User Access Policy is described in the [XDM_POLICY]. PoC User Access Policies are still available for network elements and XDM Clients, that are compliant with PoC 1.0 Enabler Release by using the AUID specified in the PoC 1.0 as specified in [OMA PoC V1.0 XDM].

PoC User Access Policy is described in the [XDM_POLICY] "*User Access Policy*". The use of the elements of PoC User Access Policy is described in [OMA-PoC-CP].

5.2.1 Structure

The general User Access Policy structure is described in the [XDM_POLICY] "*Structure*" with the PoC Enabler specific clarifications and deviations specified in this subclause and the additional, PoC specific structure in the subclause 6.3.1"*Structure*".

The following elements and attributes of the <rule> element together with their usage are used by PoC Enabler as specified in [XDM_POLICY]:

a)   the <conditions> element;

b)   the <actions> element.

NOTE 1:   This specification does not define any value for the <transformations> element defined as a child of the <rule> element in [RFC4745]. This means that, if present, the PoC Server ignores this element.

The following elements and attributes of the <conditions> element together with their usage are used by PoC Enabler as specified in [XDM_POLICY]:

a)   the <identity> element;

b)   the <external-list> element;

c)   the <other-identity> element;

d)   the <sphere> element;

e)   the <validity> element;

NOTE 2:   This specification does not define any value for those elements defined as a part of the <conditions> element in [RFC4745], but which are not explicitly identified in the list above. This means that, if present, the PoC Server ignores such elements.

f)   the <anonymous-request> element;

g)   the <media-list> element;

h)   the <service-list> element, as defined in [XDMSPEC] "*Common Extensions*";

i)   the <qoe> element;

j)   the <invited-identities> element;

k)   the <activities> element;

l)   the <country-region-list> element;

m)   the <location-list> element.

The following elements and attributes of the <actions> element together with their usage are used by PoC Enabler as specified in [XDM_POLICY]:

a)   the <allow-auto-answermode> element;

b)   the <allow-reject-invite> element;

c)   the <allow-offline-storage> element;

d)   the <allow-manual-answer-override> element;

e)   the <allow-barring-media-content> element;

f)   the <allow-barring-media-stream> element;

g)   the <allow-reject-outgoing-invite> element.

5.2.2   Application Unique ID

Application Unique ID is described in the [XDM_POLICY] "*Application Unique ID*".

5.2.3   XML schema

XML schema is described in the [XDM_POLICY] "*XML Schema*". The PoC specific XML schema extensions are described in subclause 6.3.2 "*XML schema*".

5.2.4   Default namespace

Default namespace is described in the [XDM_POLICY] "*Default Namespace*".

5.2.5   MIME type

MIME type is described in the [XDM_POLICY] "*MIME Type*".

5.2.6   Validation constraints

Validation constraints are described in the [XDM_POLICY] "*Validation constraints*".

5.2.7   Data semantics

Data semantics are described in the [XDM_POLICY] "*Data Semantics*" with the PoC specific clarifications specified in this subclause. The data semantics for PoC specific extensions are described in subclause 6.3.4 "*Data semantics*".

An authorization rule is applicable to PoC service only if the condition element <service-list> is not present, or if present the child element <service> includes the "enabler" attribute value "poc" or the child element <all-services-except> does not include a <service> child element with "enabler" attribute value "poc".

The sub-element <full-duplex> is not applicable for Audio and Video in the PoC service.

The action <allow-reject-invite> element value "true" is not applicable for the following elements in the PoC service:

a)   the <country-region-list> element;

b)   the <location-list> element.

The action element <allow-barring-media-content> is applicable to the following elements for barring/not barring incoming Media content:

a)   the <audio> media element;

b)   the <video> media element;

c) the <text> media element;

d) the <image> media element;

e) the <binary-data> media element;

f) the <group-advertisement> media element.

The action element <allow-barring-media-stream> is applicable to the following elements for barring/not barring incoming Media streams:

a) the <message-session> media element;

b) the <file-transfer> media element;

c) the <audio> media element;

d) the <video> media element;

e) the <poc-speech> media element;

f) the < media-streaming-control> media element.

A <media-list> element with a list of media elements is used to specify allowed media types. List of possible media elements defined in PoC are:

a) The <message-session> media element indicating session based messaging as defined in [RFC4975];

b) The <file-transfer> media element indicating file transfer as defined in [OMA_IM_TS_ Endorsement];

c) The <audio> media element indicating a streaming media type as defined in [RFC3840];

d) The <video> media element indicating a streaming media type as defined in [RFC3840];

e) The <poc-speech> media element indicating a PoC speech media type as defined in [OMA-PoC-CP];

f) The <group-advertisement> media element indicating a group advertisement as defined in [XDM_GROUP] "*Extended Group Advertisements*".

NOTE: All other media elements not listed in the list above are ignored by the PoC Server.

A <sphere> element is used to specify the User defined conditions profile to be used by Incoming and Outgoing Condition Based PoC Session Barring. Possible values defined in PoC are:

a) "none";

b) "private";

c) "business".

The action <allow-reject-outgoing-invite> element value "true" is applicable for the following elements in the PoC service:

a) the <media-list> element;

b) the <qoe> element;

c) the <sphere> element;

d) the <validity> element;

e) the <invited-identities> element;

f) the <activities> element;

g) the <country-region-list> element;

h) the <location-list> element.

5.2.8   Naming conventions

Naming conventions are described in the [XDM_POLICY] "*Naming conventions*".

5.2.9   Global Documents

Global Documents are described in the [XDM_POLICY] "*Global Documents*".

5.2.10   Resource interdependencies

Resource interdependencies are described in the [XDM_POLICY] "*Resource interdependencies*".

5.2.11   Authorization policies

Authorization policies are described in the [XDM_POLICY] "*Authorization policies*".

6. PoC extensions to Shared XDM Application Usages

6.1 Group Usage List

6.1.1 Structure

A PoC specific URI usage SHALL be used in a Group Usage List stored in the List XDMS.

The PoC URI usage, <pocusage> element, is defined to substitute <uriusage> element and is used within the <uriusages> element as specified in [XDM_LIST].

6.1.2 Application Unique ID

Application Unique ID is described in the [XDM_LIST] "*Group Usage List*".

6.1.3 XML schema

The <pocusage> element SHALL conform to the XML schema described in [XSD-1_POCUSAGE].

6.1.4 Validation constraints

None.

6.1.5 Data semantics

The <pocusage> element, if present in any <uriusages> element, SHALL indicate the type of PoC Group URI. The possible values are:

"chat"   the PoC Group URI is a Chat PoC Group.

"prearranged"   the PoC Group URI is a Pre-arranged PoC Group.

6.2 PoC extensions to Group

6.2.1 Structure

In addition to the child elements that the <actions> child element of any <rule> element MAY include according to [XDM_GROUP], the <actions> child element of any <rule> element MAY include the following PoC Specific child elements:

    a) the <allow-dispatch> element:
- SHALL include an "allow" attribute indicating whether the PoC User is allowed to adopt the PoC Dispatcher role;

- MAY include an <allow-dispatcher-role-transfer> element indicating whether the PoC User is allowed to transfer the PoC Dispatcher role;

    b) the <mbc_scheme> element;

    c) the <auto-release> element

    d) the <crisis-event-entity-address>

- SHALL include a "ref" attribute giving the address to the PoC Crisis Event Handling Entity to be used for a Pre-arranged PoC Group or a Chat PoC Group.n "allow" attribute indicating whether the PoC User is allowed to adopt the Moderator role.

e) the <allow-moderator> element

- SHALL include an "allow" attribute indicating whether the PoC User is allowed to be a Moderator;

f) the <allowed-media-inactivity> element

- SHALL include a "release-when-poc-speech-inactive" attribute indicating whether the PoC Session is released when the PoC Speech Media Type has been inactive for <allowed-media-inactivity> seconds or if inactivity for all Media Types needs to be inactive before releasing the PoC Session.

6.2.2   XML schema

The <allow-dispatch>, <allow-dispatcher-role-transfer> and <mbc_scheme> elements SHALL conform to the XML schema which namespace name is "urn:oma:xml:poc:poc2.0-shared-group-ext" and is described in [XSD-2_SHARED_GROUP_EXT].

The <crisis-event-entity-address> element SHALL conform XML schema which namespace name is "urn:oma:xml:poc:poc2.1-shared-group-ext" and is described in [XSD-2_1_GROUP _EXT]. The "allow" attribute SHALL conform to the XML schema described in [XSD_XDM2_EXT].

The "ref" attribute<allow-moderator> elements SHALL conform to the XML schema described in [XSD_XDM2_EXT].

The <auto-release> and <allowed-media-inactivity> elements SHALL conform to the XML schema which namespace name is defined by [XSD-2_1_GROUP _EXT].

The "release-when-poc-speech-inactive" attribute SHALL conform to the XML schema described by [XSD-2_1_GROUP _EXT].

6.2.3   Validation constraints

The Group actions SHALL conform to the XML schema described in subclause 6.2.2 "*XML schema*", with the clarifications given in this subclause.

If the XDMC adds in the <actions> child element of a <rule> element an <allow-dispatch> element with the "allow" attribute set to the value "false" and the child element <allow-dispatcher-role-transfer> set to the value "true", the Group XDMS SHALL return an HTTP "409 Conflict" including the error element <constraint-failure>. If included, the "phrase" attribute SHOULD be set to "Conflict in PoC Dispatcher actions".

6.2.4   Data semantics

The <allow-dispatch> element SHALL be used to indicate whether the identity matching this rule is allowed to perform the PoC Dispatcher role related actions, as defined in [OMA-PoC-SD].[OMA-PoC-CP].

The possible values for the "allow" attribute are:

"false"   instructs the PoC Server performing the Controlling PoC Function to deny the PoC User to adopt the PoC Dispatcher role. This SHALL be the default value taken in the absence of the element.

"true"   instructs the PoC Server performing the Controlling PoC Function to allow the PoC User to adopt the PoC Dispatcher role.

The absence of the element <allow-dispatch> is equal as if there is <allow-dispatch> element with "allow" attribute equal "false".

If multiple rules with the action <allow-dispatch> apply for an identity, the identity is allowed to adopt the PoC Dispatcher role if the attribute "allow" in at least one of the actions equals "true".

The <allow-dispatcher-role-transfer> element SHALL be used to indicate that the identity matching this rule is allowed to request the transfer of an Active PoC Dispatcher role to another Participant, as defined in [OMA-PoC-CP]. The possible values are:

"false"   instructs the PoC Server performing the Controlling PoC Function to block the role transfer request. This SHALL be the default value taken in the absence of the element.

"true"   instructs the PoC Server performing the Controlling PoC Function to accept the role transfer request.

The <mbc_scheme> "action" SHALL be used to indicate that the identity matching this rule is allowed to initiate the PoC Group Session with the indicated Media Burst Control Scheme. The possible values are of string type limited to 12 characters.

> NOTE: Typically the standardised Media Burst Control procedure is used if <mbc_scheme> is not listed.

If multiple rules with the action <mbc_scheme> apply for an identity, the identity is allowed to initiate the PoC Group Session with any of the indicated Media Burst Control Schemes.

The <crisis-event-entity-address><allow-moderator> element SHALL be used to indicate that a special PoC Crisis Event Handling Entitywhether the identity matching this rule is invitedallowed to perform the Moderator role related actions, as defined in [OMA-PoC-CP].

"false"   instructs the PoC Session when a Pre-arrangedServer performing the Controlling PoC Group Session or a ChatFunction to deny the PoC Group Session is initiated.User to adopt the PoC Moderator role. This SHALL be the default value taken in the absence of the element.

"true"   instructs the PoC Server performing the Controlling PoC Function to allow the PoC User to adopt the PoC Moderator role.

The possible valuesabsence of the <crisis-event-entity-address> element <allow-moderator> is a SIP URL giving the address to the PoC Crisis Event Handling Entity.equal as if there is <allow-moderator> element with "allow" attribute equal "false".

If multiple rules with the action <allow-moderator> apply for an identity, the identity is allowed to adopt the Moderator role if the attribute "allow" in at least one of the actions equals "true".

The <auto-release > element SHALL be used to indicate whether a PoC Session SHALL be released when the initiator of a Pre-arranged PoC Session leaves the PoC Session.The possible values for the <auto-release> element are:

"false"   instructs the PoC Server to not release the PoC Session when the initiator leaves the PoC Session. In the absence of the element this SHALL be the default value.

"true"   instructs the PoC Server to release the PoC Session when the initiator leaves the PoC Session.

The <allowed-media-inactivity> element includes the time in seconds the PoC Server SHALL allow inactivity in a Media-floor Control Entity in a Chat PoC Group Session or in a Pre-arranged PoC Group Session before taking a decision whether to release the PoC Session or not. The possible values are:

"0"   instructs the PoC Server to allow infinitive inactivity in Media-floor Control Entities.

Greater than "0"   instructs the PoC Server to start a timer using the value in <allowed-media-inactivity> element in seconds when there is no activity within a Media-floor Control Entity as defined in the [OMA-PoC-UP].

The <release-when-poc-speech-inactive> attribute SHALL be used to indicate whether a Chat PoC Group Session or a Pre-arranged PoC Group Session is released when the time in the <allowed-media-inactivity> element expires.

The possible values for <release-when-poc-speech-inactive> attribute are:

"false"   instructs the PoC Server to not release the PoC Session when the time in the <allowed-media-inactivity> element expires. In the absence of the attribute this SHALL be the default value.

"true"   instructs the PoC Server to release the PoC Session when the time in the <allowed-media-inactivity> element expires.

6.3   PoC extensions to User Access Policy

6.3.1   Structure

In addition to the child elements that the <actions> child element of any <rule> element MAY include according to [XDM_POLICY], the <actions> child element of any <rule> element MAY include the following PoC Specific child elements:

   a)   the <pocbox-type> element, as defined in sub-clauses 6.3.2 "*XML schema*" and 6.3.4 "*Data semantics*".

6.3.2   XML schema

The <pocbox-type> element SHALL conform to the XML schema described in [XSD-2_POCRULES].

The XML schema described in [XSD-2_POCRULES] SHALL be used as an extension to the XML schema described in [RFC4745], if any of the following functionalities are supported:

   a)   the PoC Box function.

6.3.3   Validation constraints

None.

6.3.4   Data semantics

The <pocbox-type> element indicates which type of PoC Box will be connected when the incoming PoC Session invitation is routed to a PoC Box. This element has one of the following two values, whose use is described in [OMA-PoC-CP]. The value is of an enumerated integer type:

"nwpocbox" instructs the NW PoC Box to be connected. This is the lowest value for this action, and also the value used when no match happens, according to [RFC4745]. This value is assigned the numeric value of 0.

"uepocbox" instructs the UE PoC Box to be connected. This value is assigned the numeric value of 1.

7. Group Advertisement

Group Advertisement is described in the [XDM_GROUP] "*Extended Group Advertisement*". The use of the Group Advertisement is described in [OMA-PoC-CP].

7.1   Structure

The general Group Advertisement structure is described in the [XDM_GROUP] "*Structure and Data Semantics*" with the PoC Enabler specific clarifications and deviations specified in this subclause and the additional, PoC specific structure, in the subclause 8.1 "*Structure*".

The following elements and attributes of the <group-advertisement> element together with their usage are used by PoC Enabler as specified in [XDM_GROUP]:

   a)   the <group> element;

   NOTE 1: In PoC service only one <group> element is sent in a Group Advertisement.

   b)   the <note> element.

The following elements and attributes of the <group> element together with their usage are used by PoC Enabler as specified in [XDM_GROUP]:

   a)   the "type" attribute indicating the type of the PoC Group;

   NOTE 2: In PoC service only the values of "dialed-in" and "dialed-out" are used.

   b)   the <uri> element with the value set to the PoC Group Identity of the PoC Group;

   c)   the <display-name> element with the value set to PoC Group Name of the PoC Group;

   d)   the <supported-services> element with the value indicating at least usage for the PoC Enabler;

   e)   any other elements or attributes from any other namespaces for the purposes of extensibility.

   NOTE 3: The <supported services> element can also indicate usage by other Enablers (e.g. IM) as specified in
            [XDM_GROUP] "*Extended Group Advertisement*".

7.2   XML schema

XML schema is described in the [XDM_GROUP] "*XML Schema*". The PoC specific XML schema extensions are described in subclause 8.2 "*XML schema*".

7.3   MIME type

MIME type is described in the [XDM_GROUP] "*MIME Type*".

7.4   Validation constraints

None.

7.5   Data semantics

Data semantics are described in the [XDM_GROUP] "*Structure and Data Semantics*" with the PoC specific clarifications specified in this subclause. The data semantics for PoC specific extensions are described in subclause 8.4 "*Data semantics*".

The "type" attribute SHALL include one of the following values:

"dialed-in"   in the case of a Chat PoC Group;

"dialed-out"   in case of a Pre-arranged PoC Group.

8. PoC extensions to Group Advertisement

8.1   Structure

In addition to the child elements and attributes that the <group> child element of any <group-advertisement> element MAY include according to [XDM_GROUP], the <group> child element of any <group-advertisement> element MAY include the following PoC Specific child elements and attributes:

   a)   the "dispatch" attribute, as defined in sub-clauses 8.24 "*XML schema*" and 8.4 "*Data semantics*".

8.2   XML schema

The "dispatch" attribute SHALL conform to the XML schema described in [XSD-2-POCDISPATCH].

8.3   Validation constraints

None.

8.4   Data semantics

The "dispatch" attribute indicates whether or not the PoC Group is a Dispatch PoC Group.

The "dispatch" attribute SHALL include one of the following values:

"true"   the PoC Group is a Dispatch PoC Group;

"false"   the PoC Group is not a Dispatch PoC Group.

9. PoC Specific Application Usages

9.1 PoC Sessions

This subclause describes the PoC Sessions Application Usage. The use of the elements of PoC Sessions is described in [OMA-PoC-CP].

9.1.1 Structure

The PoC Sessions document SHALL conform to the structure of the resource lists document described in [RFC4826] Section 3 with the following clarifications:

1) A <list> element in the content of the <resource-lists> element SHALL NOT include a <list>, <external> or <entry-ref> element;

2) An <entry> element in a <list> element in the content of the <resource-lists> element MAY include a <list> element containing PoC Addresses;

3) An <entry> element in a <list> element in the content of the <resource-lists> element MAY include a <subject> element;

4) An <entry> element in a <list> element in the content of the <resource-lists> element SHALL include a <session-type> element;

5) An <entry> element in a <list> element in the content of the <resource-lists> element SHALL include a <used-media-types> element.

6) An <entry> element in a <list> element in the content of the <resource-lists> element SHALL include a <number-of-participants> element.

7) An <entry> element in a <list> element in the content of the <resource-lists> element MAY include a <group-id> element.

9.1.2 Application Unique ID

The AUID SHALL be org.openmobilealliance.poc-sessions.

9.1.3 XML Schema

The elements <list>, <subject>, <session-type> and <used-media-types> SHALL conform to the XML schema described in [XSD-2_1-POCSESSIONS].

The XML schema described in [XSD-2_1-POCSESSIONS] SHALL be used as an extension to the XML schema described in [RFC4826], if any of the following functionalities are supported:

a) PoC Session Search.

9.1.4 Default Namespace

The default namespace used in expanding URIs SHALL be "urn:ietf:params:xml:ns:resource-lists" defined in [RFC4826].

9.1.5 MIME Type

The MIME type SHALL be "application/resource-lists+xml".

9.1.6 Validation constraints

In addition to the XML schema, the validation constraints on a URI list of PoC Session Identities SHALL conform to those described in [RFC4826] Section 3.4.5, with the following clarifications.

If the XDMC uses or adds an <entry-ref> or an <external> child element (specified in [RFC4826]) to the <list> element, the PoC Server SHALL return a "409 Conflict" response which includes the XCAP error element <constraint-failure>. If included, the "phrase" attribute SHOULD be set to "Not allowed".

9.1.7 Data Semantics

The data semantics for a URI list of PoC Session Identities SHALL conform to those described in [RFC4826] Section 3.4.6 with the following extensions:

The "uri" attribute of an <entry> element in a <list> element in the content of the <resource-lists> element SHALL be the PoC Session Identity of a PoC Session being described by the PoC Sessions document.

If a <list> element is included in an <entry> element then the <list> element SHALL contain PoC Adresses of PoC Users that are allowed to join the PoC Session.NOTE 1:   If no <list> element is included in an <entry> element then this means that any PoC User is allowed to join the PoC Session.

The <subject> element MAY be used to store subject information received about the PoC Session. A typical example of subject information received about the PoC Session is the <subject> element contained in a Group document as defined by [XDM_GROUP].

NOTE 2: If no <subject> element is included in an <entry> element then this means that the corresponding PoC Session can not be part of a search result with any required <subject> value.

The <session-type> element in an <entry> element SHALL contain the type of the PoC Session. The possible valus are:

"adhoc"   represents an Ad-hoc PoC Group Session.

"prearranged"   represents a Pre-arranged PoC Group Session.

"chat"   represents a Chat PoC Group Session.

The <used-media-types> element in an <entry> element SHALL contain a list of the Media Types being used in the PoC Session. The possible values are:

"speech"   represents PoC Speech.

"audio"   represents Audio.

"video"   represents Video.

"discrete"   represents Discrete Media.

"streaming"   represents Media Streaming Control.

The <number-of-participants> element in an <entry> element SHALL contain the current number of participants of the PoC Session.

If a PoC Group Identity is associated with the PoC Session then the <group-id> element in an <entry> element SHALL contain the PoC Group Identity.

NOTE: If no <group-id> element is included in an <entry> element then this means that the corresponding PoC Session can not be part of a search result with any required <group-id> value.

9.1.8 Naming conventions

The naming conventions for a URI list of PoC Session Identities SHALL conform to those described in [RFC4826] Section 3.4.7.

The PoC Server SHALL use a single document for all ongoing PoC Sessions hosted by the PoC Server. The filename SHALL be "index".

9.1.9 Global documents

The PoC Sessions document SHALL be a Global Document.

9.1.10 Resource interdependencies

The resource interdependencies SHALL conform to those described in [RFC4826] Section 3.4.8.

9.1.11 Authorization policies

The authorization policies SHALL conform to those described in [XDMSPEC] "*Authorization*".

Appendix A.   Change History   (Informative)

A.1   Approved Version History

Reference	Date	Description
OMA-TS-PoC_Document_Management-V2_1-20110802-A	02 Aug 2011	Status changed to Approved by TP: OMA-TP-2011-0275-INP_PoC_V2_1_ERP_for_final_Approval

Appendix B.   Static Conformance Requirements   (Normative)

The SCRs defined in the following tables include SCRs for:

-   The PoC XDM Client.

The SCRs are defined as described in [OMA_SCR_Rules].

Each SCR table identifies a list of supported features as:

- Item: Identifier for a feature. It MUST be of type ScrItem.

- Function: Short description of the feature.

- Reference: Section(s) of the specification(s) with more details on the feature.

- Requirement: Other features required by this feature, independent of whether those other features are mandatory or optional. The notation in the dependency grammar MUST be used for this column when other features are required, else the column MUST be left empty.

Dependency grammar used in this section is specified in [OMA_SCR_Rules]:

TerminalExpression =	ScrReference / NOT TerminalExpression / TerminalExpression LogicalOperator TerminalExpression / " (" TerminalExpression ")"
ScrReference =	ScrItem / ScrGroup
ScrItem =	SpecScrName "–" GroupType "–" DeviceType "–" NumericId "-" Status / SpecScrName "–" DeviceType "–" NumericId "-" Status
ScrGroup =	SpecScrName ":" FeatureType / SpecScrName "–" GroupType "–" DeviceType "–" FeatureType

SpecScrName = 1*Character;

GroupType = 1*Character;

DeviceType = "C" / "S"; C – client, S – server

NumericId = Number Number Number

Status = "M" / "O"; M - Mandatory, O - Optional

LogicalOperator = "AND" / "OR"; AND has higher precedence than OR and OR is inclusive

FeatureType = "MCF" / "OCF" / "MSF" / "OSF";

Character = %x41-5A;

The following markers are used below to describe the SCRs:
- o   PoCv1.0 - SCR Item that is the same in PoCv2.0 and PoC v2.1 as it is in PoCv1.0
- o   PoCv2.0 - SCR Item that is the same in PoCv2.1 as it is in PoCv2.0
- o   PoCv2.1 - SCR Item that is new in PoCv2.1.
- o   PoCv1.0mod - SCR Item that exists in PoCv1.0, but is modified in PoCv2.0 or in PoC v2.1 or in both.
- o   PoCv2.0mod - SCR Item that exists in PoCv2.0, but is modified in PoC v2.1

B.1 PoC Group (XGP)

This subclause describes the SCRs for functions needed to support PoC Groups.

B.1.1   PoC XDM Client

Item	Function	Reference	Requirement
POC_XDM-XGP-C-001-M	XDM Client generating PoC Group documents in conformance with the Group document rules PoCv1.0	5.1 [XDM_GROUP]: 5.1	XDM_Group-XOP: MCF
POC_XDM-XGP-C-002-M	XDM Client handling of HTTP "409 Conflict" response from the Group XDMS PoCv1.0	5.1.6 [XDM_GROUP]: 5.1.6	XDM_Group-ERR-C-001-M
POC_XDM-XGP-C-003-O	XDM Client conforming to PoC specific Group extensions: PoC Dispatcher elements and attributes PoCv2.0	6.2	
POC_XDM-XGP-C-004-O	XDM Client conforming to PoC specific Group extensions: Media Burst Control Scheme elements and attributes PoCv2.0	6.2	
POC_XDM-XGP-C-005-O	XDM Client conforming to PoC specific Group extensions: Moderated PoC Crisis Event HandlingGroups elements and attributes and attributes	6.2	

B.2 PoC User Access Policy (XAP)

This subclause describes the SCRs for functions needed to support PoC User Access Policy.

B.2.1   PoC XDM Client

Item	Function	Reference	Requirement
POC_XDM-XAP-C-001-M	XDM Client generating PoC User Access Policy document in conformance with the User Access Policy rules PoCv1.0	5.2 [XDM_POLICY]: 5.1	XDM_Policy-XOP: OCF
POC_XDM-XAP-C-002-M	XDM Client handling of HTTP "409 Conflict" response from the Policy XDMS PoCv1.0	5.2.6 [XDM_POLICY]: 5.1.6	XDM_Policy-ERR-C-001-O
POC_XDM-XAP-C-003-M	XDM Client conforming to PoC specific User Access Policy extensions: PoC Box elements and attributes PoCv2.0	6.3	

B.3   Group Usage List (XUL)

This subclause describes the SCRs for functions needed to support PoC Group Usage List.

B.3.1   PoC XDM Client

Item	Function	Reference	Requirement
POC_XDM-XUL-C-001-M	XDM Client generating PoC URI List document in conformance with the Group Usage List rules PoCv1.0	6.1 [XDM_LIST]: 5.2	XDM_List-XOP: OCF
POC_XDM-XUL-C-002-O	XDM Client handling of HTTP "409 Conflict" response from the List XDMS PoCv2.0	[XDM_LIST]:5.2.6	

B.4   PoC Session-unrelated Features (SUF)

This subclause describes the SCRs for functions needed to support PoC Session-unrelated features, including: Group Advertisement and PoC Session Search.

B.4.1   PoC XDM Client

Item	Function	Reference	Requirement
POC_XDM-SUF-C-001-O	PoC Client generating Group Advertisement document in conformance with the Extended Group Advertisement rules PoCv1.0	7 [XDM_GROUP]: 7.1	
POC_XDM-SUF-C-002-O	XDM Client conforming to PoC specific Group Advertisement extensions: PoC Dispatcher elements and attributes PoCv2.0	8	
POC_XDM-SUF-C-003-O	XDM Client generating search request for searching PoC Sessions documents	9.1	
POC_XDM-SUF-C-004-O	XDM Client handling of HTTP "409 Conflict" response from the PoC Server	9.1.6	POC_XDM-SUF-C-003-O

Appendix C.   XML documents examples   (Informative)

C.1   Group Advertisement document

```
<?xml version="1.0" encoding="UTF-8"?>
<group-advertisement
     xmlns="urn:oma:xml:poc:group-advertisement"
     xmlns:oxe="urn:oma:xml:xdm:xdm2-extensions">

     <note>Ice Hockey Discussion Forum</note>
     <group type="dialed-in">
          <display-name>Ice Hockey Club</display-name>
          <uri>sip:ice-hockey-club@example.com</uri>
          <oxe:group-media>
               <oxe:audio/>
               <oxe:message-session>
                    <oxe:half-duplex/>
               <oxe:message-session/>
               <oxe:group-advertisement/>
          </oxe:group-media>
     </group>
</group-advertisement>
```

C.2   Group Advertisement document with Dispatch

```
<?xml version="1.0" encoding="UTF-8"?>
<group-advertisement
     xmlns="urn:oma:xml:poc:group-advertisement"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:di="urn:oma:xml:poc:dispatch-ind"
     xsi:schemaLocation="urn:oma:xml:poc:group-advertisement">

     <note>New dispatcher service</note>
     <group type="dialed-out" di:Dispatch="true">
          <display-name>Yellow Taxi Company</display-name>
          <uri>sip:yellow-taxis@example.com</uri>
```

```
        </group>

</group-advertisement>
```